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ANDREW CARNEGIE.

A CENTURY AND A HALF

OF

PITTSBURG AND HER PEOPLE

BY

JOHN NEWTON BOUCHER

EDITOR IN CHIEF

ILLUSTRATED

VOLUME II

THE LEWIS PUBLISHING COMPANY

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CHAPTER I.

The Early Iron Industry.

In the earliest ages of antiquity, long before man began to make record of his actions, he began to manufacture and use iron. Our best authorities believe that it was first made and used in Western Asia, the original home of the human race. Tubal Cain, who was removed from Adam but seven generations, is described in the first book of the Bible as "an instructor of all artificers in brass and iron." In the revised edition of the Bible he is called "the forger of every cutting instrument of brass and iron." The Egyptian civilization is the oldest of which we have any knowledge, dating back even to the second generation after Noah. Yet its earliest literature is replete with references to the making and using of iron, though modern research has disclosed but little native ore in Egypt. Herodotus, the Father of History, makes mention of iron tools being used in the construction of the Pyramids, and he speaks of their use not as a novelty but as a matter of common occurrence. Thebes and Memphis are cities of such great age that their origin is lost in the twilight of obscurity, yet antiquarians believe that sickles and other tools of iron and steel were used in those cities. The Historical Society of New York has a helmet, a chain armor, breast plate and other pieces of iron that are claimed to be over three thousand years old, and which moreover exhibit considerable skill in their manufacture. Pieces of iron were taken from under the obelisk brought to Central Park, New York, from Alexandria in Egypt in 1880, yet it was erected fifteen hundred years before the birth of Julius Caesar, and had stood in the place from which it was taken about two thousand years. Iron was moreover known to be used among the Chaldeans, the Babylonians and the Assyrians, who flourished in the age of the early Egyptians.

The Book of Job, one of the oldest of written manuscripts, treating as it does, of the period between Abraham and Moses, has many references to iron, and even to "bars of iron," "barbed irons," the "iron weapon," and to the "bow of steel," the latter reference clearly showing that the writer had knowledge of flexibility of steel. In Ecclesiasticus 38:28, we read that, "The smith also sitting by the anvil and considering his iron work, the vapor of

the fire wasteth his flesh, and he fighteth with the heat of the furnace; the noise of the hammer and anvil is ever in his ears, and his eyes still look upon the pattern of the thing he maketh; he setteth his mind to finish the work and watcheth to polish it perfectly."

When Caesar invaded England his commentaries indicated that he found the early Britons using iron money, but nowhere does he intimate that they fought his armies with iron weapons. Iron was not so generally used in Great Britian in the early centuries as it was in other countries. The people of Scotland who invaded England in the reign of Edward II stole iron from the English in preference to any other plunder they could secure, showing that it was a scarce article among them at home. The English people did not know that iron could be made without charcoal, and for many centuries discouraged its manufacture, because the making of the necessary charcoal used up their forests too rapidly. Their supply of trees has always been limited, and they have wisely preserved them. Accordingly until they learned to smelt iron with coal or its products, of which they have an abundance, they encouraged the purchase of iron from Spain, Sweden and Russia, rather than its home manufacture. About 1755 the efficacy of coke in smelting iron ore was discovered in England, and at once the manufacture of iron became more general. So they have had but few charcoal furnaces in England in the last one hundred and fifty years.

But a vastly different situation confronted the early Americans in manufacturing iron. Here they were surrounded by unlimited acres of timber, which must necessarily be cleared away for agricultural purposes. It was therefore comparatively easy to make charcoal, easier indeed than to make coke, even though they were near the fields of coal suitable for its manufacture. Our first iron in America was exclusively charcoal iron, that is, iron made from ore smelted by heat produced by charcoal. To make iron in small quantities from carbonate iron ore is a very simple process, and this perhaps accounts for its early and general use in the ages long gone by. Iron ore can be smelted in an ordinary blacksmith's forge and a certain grade of iron, though perhaps of a very inferior quality, can be thus produced. Generally speaking, iron ore can be smelted only where the heat of the fire is intensified by a blast of air such as a blacksmith forces through his forge by means of a bellows. This principle was used in the smelting of iron ore when the only known bellows was the skin of a goat, by which simple means the necessary blast of air was produced, and this was carried on for untold centuries. The same blast of air is as essential in the manufacture of iron today at it was then, for the most modern iron furnaces have not gone beyond the original principle, although the method of making the blast, we need scarcely suggest, is no longer the primitive one of the ancient manufacturer. Much of the early iron was made by the simple process of digging a hole in the ground not unlike a well and generally in the side of a hill. This hole was then filled with alternate layers of charcoal and of iron ore. Being on the hillside, they easily tapped the bottom of the hole or well from

below and through this small opening forced the blast of air with the bellows made of the goat skin. When the layers of ore were sufficiently heated by the burning charcoal, fanned, as it was, by the blast from below, the molten iron dropped to the bottom of the well, or furnace, and thus they produced iron though necessarily in small quantities.

The credit of the discovery of iron ore in America is due to the renowned Sir Walter Raleigh. In an expedition which he fitted out in 1585, intending to plant a colony on Roanoke Island, in searching for gold, as all early settlers did, they discovered iron ore instead, and the year following returned to England and reported their discovery. The historic colony of Jamestown, Virginia, in 1607, discovered iron ore, and in 1608 shipped about seventeen tons of metal, having sold it to the East India Company at four pounds per ton. This was the first iron made by Europeans from American ore. Still later iron ore was found in all of the Atlantic States, and attempts, some successful and some otherwise, were made to manufacture it into iron. At Lynn and Braintree, Massachusetts, the business was early carried on with considerable success, and as the colonies west of Massachusetts were founded the iron industry was not neglected. It thus spread over New York, New Jersey and Eastern Pennsylvania, so that long before the Revolutionary war we had iron furnaces scattered over our colonial possessions as far west as central Pennsylvania. These stood the colonists in good stead during the Revolution, for they made canister and many other materials of warfare for the patriot army.

Very early in Western Pennsylvania, carbonate iron ore was discovered in what was then regarded as large quantities. When William Crawford, the first judge of Westmoreland county, who was afterward burned at the stake by the Indians, was removed from the bench because of his affiliations with Virginia in the boundary dispute, he became a surveyor for Yohogania county which, though in southwestern Pennsylvania, was claimed and laid out by Virginia. In his survey book under date of July 11, 1780, he made an entry of a tract of land warranted to Benjamin Johnston, and described it as "being on the Yohogania river and to include a bank of iron ore." This is the first notice that we have of the discovery of iron ore in Western Pennsylvania, but we are not able to say when its discovery nearer Pittsburg was made. It doubtless followed that date very shortly, for iron was a necessity in the new and growing country, and men were prospecting for it and for other minerals in every direction. It must be remembered in this connection that before that day the only method of securing iron was by transporting it on pack horses from east of the Allegheny mountains.

In 1789 William Turnbull and Peter Marmie, of Philadelphia, built a furnace and forge on Jacobs creek, in Fayette county. The furnace was put in blast on November 1, 1790, and the metal was tried the same day in the forge. The forge was used exclusively in converting metal into iron, this being done by the simple process of pounding the bars of pig iron while highly heated on an anvil with an immense hammer. The metal was thus reduced

to iron and the same results were brought about which are now accomplished by rolling the heated bars between the rollers of a rolling mill. The furnace of Turnbull and Marmie was a mile or more below the mouth of Jacobs creek, and on the Fayette side of the creek. It was known as the Alliance Iron Works, and was the first attempt at making iron west of the Alleghenies. In 1792 this company engaged to cast four hundred 6-pound shot for the Fort Pitt Arsenal. The furnace was operated regularly until 1802, when it went out of blast. The ruins of it may yet be seen and a correct picture of them is given herein. Peter Marmie was a Frenchman and was afterward un-

ALLIANCE IRON WORKS

Built in 1789, and blown on November 1, 1790. First works west of the Allegheny Mountains.

fortunate in business. Disappointment drove him to suicide, which he committed by plunging into the mouth of a heated furnace. He had been connected with Craig and Bayard in the iron trade in Pittsburg when the business was in its earliest infancy.

The Union Furnace on Dunbar creek, about four miles south of Connellsville, was the second furnace in Western Pennsylvania. It was built by Isaac Meason in 1790, and put in blast the year following. In 1793 the works were enlarged, and by an advertisement in the *Pittsburg Gazette* of April 10, 1794, it is learned that they had a supply of well sorted castings which they would sell out for cash, "at a sum which would equal about Ninety-three Dollars per ton." There were three requisites necessary to be found before the iron business could be successfully engaged in in any section. First: The projector must discover a bed of iron ore near the proposed site of the furnace, for the ore was too heavy to transport a long distance on wagons. Second: There must be a large tract of timber land from which to manufacture the charcoal used in smelting the ore. This, when the country was new, was the easiest found for our land was nearly all originally clad with a dense forest of large trees. Third: There must be water power to furnish the necessary blast of air for the industry had long since passed the goat-skin or hand-worked bellows age. Limestone for the purpose of fluxing the metal was used then as now, and though a requisite in its manufacture, the quantity used was so small that it could be hauled on wagons for many miles. A very early furnace was built in 1794 one and one-half miles south of the present village of Laughlintown. It was called the Westmoreland Furnace and was near the banks of a mountain stream which flows into the Loyalhanna about two miles south of Ligonier. It was built by Christopher Lobengier and brother, who also built a small forge in connection with it. It had, like most furnaces of that day, a casting house or foundry in connection with the furnace. This we learn from the newspapers, in one of which on August 1, 1795, George Anshutz, of Pittsburg, the manager of the Westmoreland Furnace, advertises stoves and castings for sale. Mr. James M. Swank, of Philadelphia, has in his possession a stove plate which he prizes very highly, for it was cast in that furnace in 1800 by John Probst, the fact being so marked by raised letters on the casting. Grape and canister shot from three-quarters to one and one-half inches in diameter were made at this furnace for the War of 1812. It is highly probable that neither the furnace nor the forge were in operation after 1815. The accompanying illustration is a correct picture of the mass of ruins now representing all that is left of this early venture in the iron industry.

Another furnace was built by Major-General Arthur St. Clair after he returned from the governorship of Ohio. It was built in 1803, and was called Hermitage Furnace, which was also the name of his residence which was nearby. It was located one and one-half miles northwest of old Fort Ligonier. He built it with the hope of recuperating his wasted fortune, but in this, as in many other ventures, he was sadly disappointed. It was managed for him by James Hamilton. From the *Farmers Register*, printed in Greensburg by John M. Snowden, afterwards editor of the *Pittsburg Gazette*, in the issue of November 21, 1806, we take an advertisement having for its caption "Hermitage Furnace in Blast." "The subscribers, being appointed agents by General Arthur St. Clair, for the sale of his castings generally and for the

Borough of Greensburg exclusively, give notice that they will contract with any person or persons for the delivery of castings and stoves for any number of tons, on good terms. Samples of the castings and stoves to be seen at their store in Greensburg at any time after the 20th inst." At Hermitage furnace they were compelled to use a small amount of coal in the blacksmith shop, and this was brought in sacks from a mine operated near Lockport on the Conemaugh river, a distance of twelve miles. This method was kept up until 1807 or 1808, when a great flood came and washed away the surface in several places near Ligonier exposing the outcrop of a previously unknown Pittsburg seam of coal, which was afterward used in Hermitage.

Shortly after 1806 General St. Clair abandoned the management of the furnace himself, and leased it with his mill and some other property to some Pittsburg iron dealers for three thousand dollars per annum. The story of

RUINS OF WESTMORELAND FURNACE

his creditors closing in on him in the hard times which followed the embargo has been told in the sketch of St. Clair published elsewhere in this work. In 1810 his last property was sold from him by the sheriff and purchased by General James O'Hara, a well-known business man and early capitalist of

Pittsburg. It stood idle during the hard times which followed the war, but in 1816 was again put in blast by O'Hara and Skully under the management of John Henry Hopkins, who was by no means successful. Hopkins lived in the St. Clair mansion for by this time St. Clair was nearing the end of his days in poverty and neglect in a log cabin west of Ligonier. In 1817 the furnace was closed and never operated again. Hopkins left the place a bankrupt and his goods were sold at sheriff's sale. After this he abandoned the iron business and entered the ministry of the Episcopalian Church, in which he was much more successful for he became distinguished in his day for his learning and piety. He is known in church history as Bishop Hopkins of Vermont, and a more extended sketch of him will be found elsewhere in these pages.

From a letter written by Philip Biers in 1814 to an iron purchaser in Philadelphia relative to the manufacture of iron, we learn that the iron business was "all the rage" in that section in that day and that in his judgment it would be but a few years until there would be scarcely a stream furnishing an available site for a furnace or forge which would not be thus occupied. He represented the factories in Pittsburg as offering a ready market for all the pig iron that could be produced at thirty-five or thirty-six dollars per ton. The usual exchange with forge masters was three and one-half tons of pig metal for one ton of bar iron, and the iron, he said, should be readily sold at one hundred and forty dollars per ton. He spoke also of the general market in Western Pennsylvania for all kinds of castings, and of the abundance of timber and iron ore, the latter he said could be delivered at a furnace properly located for two dollars per ton. The average furnace, in his judgment, he said, would produce from fourteen to eighteen tons of pig metal per week.

In selecting a furnace site a level place close to a stream of water and near a high bluff was preferred so that a bridge could be made from the bluff to the top of the furnace stack upon which they could readily haul the ore, limestone and charcoal ready for dumping it into the furnace. The base of the stack dare not be too high above the stream for water power was essential in making the blast. This, in the early furnaces, was made by a double bellows worked by a beam pinioned in its center, each end of which worked up and down, and thus alternately forced a continuous blast of air into the furnace. In the more modern furnaces the bellows was supplanted by fans propelled by a water wheel. When the bluff was not accessible the difficulty was overcome by building extensive trestle work, but this was expensive to build and to keep up, and was resorted to only when a bluff could not be found. Near by the base of the furnace there must be necessarily some level ground upon which to construct a casting house and upon which to lay out the sand beds. These latter extended to the outlet of the furnace. The moulten metal which, by its own weight, readily dropped to the bottom, was drawn out and through a small ditch of molder's sand which had small outlets or pockets at each side. When the main ditch or trough and the small outlets were filled

with metal the vent of the furnace was closed, and the metal was allowed to cool off. The parts of the cold metal in the outlets of the main ditch were

CALIFORNIA FURNACE

connected by small necks to the metal in the main trough and were easily knocked off with a sledge hammer. They were usually of a medium size weighing about one hundred and fifty pounds each. They were called pigs, and from this we have the well known name of "pig metal" or "pig iron." In addition to the outlet for the heated metal there was a larger one from which they took ashes, cinders, etc, from the furnace.

Burning charcoal was a leading feature of the old furnace days. The wood was cut into pieces about four feet long and placed on a charcoal bed which was merely a level spot cleared off in the midst of the woodland. These billets of wood were piled on their ends in a compact mass ranging from twenty-five to forty feet in diameter and circular in form. At the edges the

pile was only about four feet high, but in the center it was much higher, being conical in shape. Leaves and grass were then used to cover the mass of wood and upon this coating was thrown an almost air-tight covering of ground, the leaves being used to keep the earth from falling down among the billets of wood. The wood was then lighted, and the skill of the charcoal burner enabled him to stop its combustion at the proper time so as to produce charcoal and not ashes. Generally about three hundred and fifty or four hundred bushels of charcoal were used in smelting one ton of ore, and consequently the consumption of timber was very great. All over the furnace regions can yet be seen the level places which were originally used as charcoal beds. Sometimes the bed was sunk a foot or two, in which case it was called a charcoal pit.

The furnaces of Western Pennsylvania in the early day were all made of stone and varied in size from twenty feet square at the base and about twenty feet high, the walls converging at the top, to forty or fifty feet square at the base and perhaps thirty feet high. Washington furnace, built originally

RUINS OF WASHINGTON FURNACE

in 1810 near Laughlintown, was thirty-six feet square at the base. This was called the stack and was hollow from the top to bottom, the cavity being

largest below. In a medium sized furnace this cavity was about eight feet in diameter. Into this the ore, the charcoal and the limestone used for fluxing were dumped from the top of the stack. Wood for kindling a fire was placed in the bottom at first. Charcoal when properly blown by the fans produced an intense heat, so great indeed that the stone and all other materials in the ore were readily converted into a molten mass. For this reason the inside of the furnace was lined with firebrick and needed frequent renewal. When the furnace was in blast it made a roaring noise which could be heard a long distance, while from its mouth was emitted a continuous stream of sparks, which could be seen for miles at night. As they drew out metal, ashes and cinders from below, they were constantly putting in new material at the mouth or top of the furnace. They were kept in blast day and night, for otherwise the hot metal would have become chilled which necessitated great loss and extra labor. Nearby all well regulated furnaces were houses, stables, etc., for they were almost invariably located in the mountains and away from thickly settled communities. The ore was dug from ore banks and was in Western Pennsylvania known as carbonate iron ore. It was of various thicknesses ranging from six inches to two feet, and ranging in richness from ten to thirty-three per centum iron. A species called kidney ore was the richest and averaged perhaps from thirty to forty percent. It required at least three tons of the best ore to make one ton of pig metal. The native ore of Western Pennsylvania was found mostly among the mountains. A great deal of the metal made from it was transported in wagons to Pittsburg, or to the Pennsylvania canal and thence to Pittsburg, and when the Pennsylvania railroad was built, it was shipped there on it. The building of the railroads sounded the death knell to the primitive iron industry in the western part of the state, so far as manufacturing from native ores was concerned. A mistaken impression is abroad, however, that the industry has never been revived because of the want of transportation facilities. The real reason arises from other causes entirely. The difficulty is that our native ore will not make steel by the Bessemer process because of its high percentage of phosphorus, notwithstanding the Basic Process which purports to eliminate it, and furthermore Lake Superior ore, of a higher percentage of iron, can be shipped to Pennsylvania cheaper than our native ores can be mined and smelted. In this connection it must be remembered that railroad building is a feature of the last sixty years and that railroads have since been one of the greatest consumers of iron in the United States.

To hold the colonies subservient to England and force them to produce raw material only, so that England with her limited territory, might be a nation of workshops, was the main policy of English statesmen. For this reason England opposed all manufactures in the colonies. One prominent Englishman advocated that "all slitting mills, engines for drawing wire or weaving stockings be put down." Even Lord Chatham with all his sense of justice and friendship for the colonies, said that he was, "opposed to allowing the colonists to make even a hobnail for themselves." Bancroft says, "The proprietors of

English iron works were jealous of American industry. When the news reached England that six furnaces and nineteen forges were set up for making iron, they were a terror to England and their specters haunted the public imagination for a quarter of a century. The House of Commons readily resolved that 'the erecting of manufactories in the colonies tended to lessen their dependence.' They passed a bill having the clause 'that none of the plantations should manufacture iron wares of any kind out of any sows, pigs, or bars whatsoever.' To this the House of Lords added, 'that no forge, going by water, or other works should be erected in any of the said plantations, for the making, working, or converting of any sows, pigs or cast iron into bar or rod iron.'" This bill failed but its purpose, as the distinguished historian observes, "was never abandoned." It was not done to injure the colonies but out of necessity for, there being a scarcity of wood in England, and an abundance of it and of ore in America, the policy of Great Britain was to force the colonies to export crude iron, wool and other raw materials, and to receive in return textile fabrics, manufactured iron, etc. Adam Smith in his "Wealth of Nations," says: "While Great Britain encourages American manufacturers of pig and bar iron, by exempting them from duties to which the like commodities are subject when imported from any other country, she imposes an absolute prohibition upon the erection of steel furnaces and slit-mills in any of her American plantations. She will not suffer the colonists to work in those more refined manufactures, even for their own consumption, but insists upon their purchasing of her merchants and manufacturers all goods of this kind which they have occasion for."

An act prohibiting such factories was passed in 1750, but it did not stop the operation of mills erected prior to its passage. The governors of the colonies issued proclamations commanding obedience to the law, and the Pennsylvania proclamation by Governor James Hamilton was printed by Benjamin Franklin. A copy of it may be seen in the Pennsylvania Historical Society rooms in Philadelphia. The result of this law was that the colonies made little or no advancement in the iron and steel industry from 1750 down to the time they declared themselves free from Great Britain. During the Revolution they were too busy and for some years after they were too poor to manufacture more than such articles as necessity demanded. When the Revolution was closed as may be seen by Blackstone's Commentaries, England imposed a fine of one hundred pounds and three months imprisonment on any one who should induce an English skilled workman to settle abroad. For a second offence he was to be fined at discretion and imprisoned a year. By a later act these penalties were increased and were extended to any who should export machinery. Blackstone writes boastingly of these measures which were adopted "to prevent the destruction of our home manufactures."

While the absence of factories in the colonies brought about by this legislation weakened them in their final contest with the mother country, such legislation could not otherwise than strengthen the Revolutionary spirit in America. It also made it very difficult to start in the iron business in Pitts-

burg, much more so than on the eastern coast where both the prescribed machinery and skilled workmen could be more readily procured. This called into the industry the brightest and ablest men of their day. Indeed this has always been the case in the iron business. Its successful conduct requires an extensive employment of labor and capital but perhaps not more so now than it did a century or more ago, when one considers the relative wealth of the world then and now. Though begun in America by Sir Walter Raleigh by a special grant of the Virgin Queen, those who followed him in the business have been men who would not do discredit to the gallant English explorer.

Queen Anne had long before the Revolution engaged in the iron business in Virginia, while Louis the Fifteenth financed a plant near Quebec which Wolfe captured for the English in 1759. Baron Stiegel brought wealth and workmen from the Rhine and established an extensive works at Manheim, Pennsylvania. Washingtons' father, Augustine, was the chief spirit in a furnace near Mt. Vernon and the ancestor of Lincoln was master of a forge in New Jersey long before the family settled in the wilderness of Kentucky. The iron masters who immediately preceeded the Revolution were particularly hostile to England and Washington drew many officers from them. George Ross, Stephen Hopkins, James Smith and George Taylor, all iron masters, were signers of great Declaration. Ethan Allen, Nathanael Greene, Daniel Morgan, Rufus Putnam, Paul Revere and many others less famous in Washington's army had engaged in the iron business, while Arthur St. Clair, after a strange commingling of brilliant victories and sad disasters, made pig iron as we have seen, for Pittsburg's earliest factories long after the war was ended.

CHAPTER II.

Early Iron Industries in Pittsburg.

The iron business of Pittsburg began properly with the erection of the first blast furnace. It was built by George Anshutz, but the year is not definitely known. It was probably completed in 1792, or about that time. It was located on Two Mile run in the section now designated as Shadyside. Anshutz was born in Alsace on November 28, 1753, and came to America in 1789. Reaching Pittsburg while it was yet a small village on the frontier, he built the furnace without prospecting properly for ore or without counting the cost of transporting it. Failing to find ore nearby in sufficient quantities to supply the furnace, he tried hauling it on wagons and bringing it down the Allegheny river on flat boats. Both of these methods of transportation proved expensive and the furnace was abandoned in 1794. To him, to George Anshutz, the Alsatian, is due the honor therefore of being the pioneer in the iron business of Pittsburg. There was a casting house or foundry in connection with the furnace. In this connection the reader will doubtless be interested in a letter written by Mr. George Anshutz Berry, who died in the fall of 1907, and who was formerly president of the Citizens' National Bank of Pittsburg, and a grandson of the pioneer iron producer. The letter is taken from "Iron in All Ages," by Mr. James M. Swank of Philadelphia. It is dated May 8, 1891, when Mr. Berry was entering on his seventy-fourth year. In it he writes:

"I have a very clear recollection of things fifty and even sixty years ago. I often heard my grandfather speak of the furnace, as well as my uncles and aunts, all brothers and sisters of my mother, some of whom have lived to within the last fifteen years. Mrs. Rahm, my mother's oldest sister, who was born February 17, 1788, and died on July 31, 1878, was four years old when the furnace was built. She had a very clear recollection of it and told me many circumstances connected with it. I have a family Bible which has been in our family for over seventy years and in which my mother's birth, on December 27, 1793, is recorded, and I had it from her as well as from all the family that she was born at the furnace referred to above.

"In my younger days I heard many of the older residents of the east end of the city speak of seeing the old stack. Major William B. Negley, one of our

oldest and best known citizens, told me today that when he first built on the site now occupied by the mansion of M. K. Moorhead, Esq., he took down part of the old stack, and, going through the cinder pile, found several relics of the business, such as a shovel, pick, etc. John A. Renshaw, Esq., who also built on part of the property, told me he could locate the spot occupied by the furnace as well as the tail-race which carried the water from the furnace. On several occasions I talked with the late William M. Lyon on the subject. He mentioned several things in connection with the furnace, among others that after my grandfather abandoned it, it was used by Anthony Beelen as a foundry. The family of the late Jonas Roup had in use until a recent period pots, skillets, etc., made at the furnace.

"The late Judge James Veech was considered authority on all matters of the olden time. He came here from Fayette county, and I think wrote a history of the county. In a long newspaper article now before me, in which he endeavors to establish the fact that the first blast furnace west of the Allegheny mountains was built in Fayette and not in Allegheny county, he says, speaking of my grandfather's furnace: 'My researches on the subject put the above abortive enterprise at least two years later.' [That is 1792 instead of 1790.] 'The facts on this subject which I am about to state are made out mostly from records consulted and from original papers.' He thus admits the existence of the furnace, but is a little doubtful of dates. Of course, if the furnace was built, of which there is no doubt, it was put in blast, but for how long I have no positive knowledge. However this may be, I always heard that ore was not found in sufficient quantity in the neighborhood of the furnace, and that the supply for a while was brought down the Allegheny river, but this being too expensive, the enterprise was abandoned.

"My grandfather next turns up at Westmoreland furnace, as will be seen from an advertisement in the Pittsburg *Gazette* as follows: 'Westmoreland Furnace—For sale, at said furnace, about three miles from Fort Ligonier, near the state road, stoves and a fine assortment of the best castings, at the most reasonable prices. George Anshutz, Manager. August 7, 1795.'

"I think that the above information will satisfy you that George Anshutz built the first furnace that was built in Allegheny county, and that it was in operation about the years 1792 to 1794. George Anshutz Berry."

It is altogether probable that George Anshutz had been engaged in the iron industry before coming to America, for it is not likely that his knowledge gained in the Pittsburg furnace would warrant the owners in making him manager of Westmoreland furnace had he nothing else to commend him. He managed Westmoreland furnace for John Probst and remained there about a year. Then he united with Judge John Gloninger and Mordecai Massey in building Huntingdon furnace in 1796. He was more successful there than at Pittsburg. Though he had probably no interest in Huntingdon furnace further than to superintend its construction, he managed it for them and in 1808 became the owner of the one-fourth of the property. Some years later he retired from business, and died in Pittsburg on February 28, 1837, in his eighty-fourth year.

Anshutz's unfortunate adventure did not discourage others from engaging in the business, though they preferred to manufacture various products from iron rather than to engage in the general furnace business.

Cramer's Almanac for 1804 shows that they were manufacturing iron in 1803 and the product is indeed large for so small a town. It is as follows:

Bar iron, axes, hoes, plow-points, etc.	$19,800
Cutlery, augers, chisels, hackles, planing bits, etc.	1,000
Cut and hammered nails	16,128
Cowbells	200
Guns, rifles, etc	1,800
Scythes and sickles	1,500
Tinware	12,800
Brass, andirons, still-faucets, etc	2,800
Total in iron products	$36,228

Joseph McClurg, a name well known in the early iron industries of Western Pennsylvania, must be remembered as the projector and builder of the first successful iron foundry in Pittsburg. This he built in 1805, on the corner of Fifth avenue and Smithfield street on the ground now occupied by the Park building. Joseph Smith and John Gormly were associated with him in this enterprise when it was built, but both of them had left the firm before 1807. Subsequently McClurg took his son, Alexander, into partnership with him. The works were known as the "Pittsburg Foundry." On February 12, 1806, Joseph McClurg advertised in the *Commonwealth* that "the Pittsburg Foundry is now complete." It was likely kept in steady operation as a foundry for general castings until the War of 1812 came, when it was converted into a cannon foundry and as such, was patronized by the government of the United States. In it were cast cannon, howitzers, shells and balls. These were sent both north and south, for they were used by Commodore Perry's fleet on Lake Erie and by the army under General Jackson at New Orleans.

From Cramer's Almanac, from which we have already quoted, it is learned that there were three nail factories in Pittsburg as early as 1806. They were known as Porter's, Sturgeon's and Stewart's. The almanac boasted that the three factories made "about forty tons of nails yearly." But they increased their output rapidly, for in 1810 the town is credited with producing two hundred tons of cut and wrought nails.

There were four nail factories here in 1807, one of which was credited with the product of one hundred tons of cut and hammered nails annually. Of these, Bakewells stood on Diamond Alley, near Market street. William McLean had a large factory and others were added so that the nail industry became a chief one in the city in its early years.

In 1810 the marshal reported the iron establishments in Pittsburg with their products as follows:

One flat-iron mill, product	$ 2,000
Two air furnaces, McClurg's and Beelen's, product 400 tons	40,000
Six nail factories, product	49,890
Two gun-smiths	2,400
Seventeen smith shops	34,400

Six copper, brass and tin factories	$25,500
One cutlery factory	3,000
One wire mill, Eichbaum's	2,000
Total	$159,190

The Pittsburg Foundry, built by McClurg, remained the only foundry in Pittsburg until 1810, when Anthony Beelen built a foundry, built likely on the site of Anshutz abandoned furnace, and Tupper & McCowan erected a steel furnace. Even as early as 1810, the town began to be noted as an iron center, for this industry is somewhat boastfully written up in the columns of the *Navigator* in 1811, as follows: "The manufacture of ironmongery has increased in this place beyond all calculation. Cut and wrought nails of all sizes are made in vast quantities, about we think, 200 tons per year. Fire shovels, tongs, drawing-knives, hatchets, two feet squares, augers, chisels, adzes, axes, claw hammers, door hinges, claws, hackles, locks, door handles, spinning-wheel irons, plough irons, flat-irons, etc., tons of these together with a number of other articles in the iron way, are exported annually. Abner Updegraff attempted the making of files, which he finds he can do to advantage. He also makes gimblets, and by way of experiment made a neat pen-knife, which he says could be made here as cheap as those imported."

The first rolling mill of Pittsburg was built by a Scotch-Irishman in 1811 and 1812. It was called the Pittsburg Rolling Mill. The year after it was built the almanac quoted above refers to this rolling mill as follows: "C. Cowan is erecting a most powerful steam engine to reduce iron to various purposes. It is calculated for a *seventy horse-power,* which will put into complete operation a rolling mill, a slitting mill, and a tilt-hammer, all under the same roof. With these Mr. Cowan will be enabled to furnish sheet iron, nail and spike rods, shovels and tongs, spades, scythes, sickles, hoes, axes, frying pans, cutting knives. In addition to Mr. Cowan's already extensive nail business, he makes a great supply of chains, plough irons, shingling hatchets, claw hammers, chissels, screw augers, spinning-wheel irons and smiths' vices of superior quality." This extensive mill stood on the corner of Penn street and Cecil alley, and is referred to by early writers as the Stackpole and Whiting mill. They were two Boston iron workers named respectively William Stackpole and Ruggles Whiting. They introduced nail cutting machines which both cut and headed the nails. They operated the mill during the hard times which followed the War of 1812, and strange to say, failed financially in 1819, when business of all kinds had somewhat revived.

In the *Pittsburg Almanac* in 1819 is an account of a rolling and slitting mill. It was then under the management of Joshua Malen, who came to Pittsburg from Valley Forge, and built the rolling mill addition to the Pittsburg Steam Engine Co. William Robinson, Jr., was its main owner. They had two engines of 120 horse-power each and their purpose was to manufacture bar, rolled and sheet iron.

The methods adopted of securing capital in some instances may surprise the modern reader. Before the legislature of Pennsylvania, in February, 1811, William Eichbaum, of Pittsburg, who afterwards became prominent in the trade, presented a memorial setting forth that he had erected a wire mill and had purchased a part of the needed machinery but was not financially able to complete and operate it. He therefore asked the state to lend him money for that purpose. The legislature, thereupon, passed the resolution:

"*Whereas,* It is the policy of this state to give encouragement to works of public utility, to foster our own manufactures and to render ourselves independent of foreign nations for articles of absolute necessity. Therefore, be it enacted, etc., That a loan be granted from the state to William Eichbaum of three thousand dollars." This was given with a proviso that he should repay it in seven years with three per centum interest per annum, but it was further provided that the sum should be payable in three years at six per centum interest unless the factory should be completed and in operation within three years from the date of the enactment. The mill was built on the Monongahela and made wire in time to extend the loan.

Pittsburg had made great strides in another direction in the iron business, namely, in making steam engines. They were high pressure engines and improvements were being added to them each year. The Columbian Steam Engine Company located its works on Second street and Redoubt alley in 1819. Mark Stackhouse, who was a noted engineer, was placed in charge of the factory. Their engines took a high standing from the first and some of them were taken on wagons over the mountains to the East. The factory was one that all Pittsburgers boasted of. Warden & Arthurs made steam-boat engines and many of them were taken on wagons to the lakes. Their factory was located on Second and West streets. Stackhouse was later associated with a man named Thompson in erecting a factory on Third and Liberty streets, in 1826, where they made engines for the river trade. In 1825 Smith & Benny began manufacturing them on Grant's Hill. M. B. Belknap built a factory on Pine creek and Mahlon Rogers built one on Fourth and Grant streets, both of which became noted engine factories.

Their products in 1825 were reported as follows:

	No. Engines Made	Employes	Value
Columbian Steam Engine Co.	7	20	$30,000
Warden & Arthurs	5	30	35,000
Stackhouse & Thompson	5	30	35,000
Smith & Benny	3	15	14,000
M. B. Belknap	2	6	8,000
Mahlon Rogers	2	3	800
Total	24	104	$122,800

This indicates the enormous price paid for most of the engines, a fact which

is true of all newly invented machinery. A wire factory was built in Kensington, in 1810, by a man named Eichbaum. It was operated till the hard times came which followed the War of 1812. It then remained idle till 1825 when Arnold Eichbaum installed a ten horse-power engine and began operations in it.

The iron business increased rapidly in the decade of the thirties for canals were built and these with the rivers and the turnpikes of earlier years, gave Pittsburg an advantage over other sections in securing pig iron from neighboring furnaces. Considerable ore had been discovered on the head waters of the Juniata, and furnaces had been in operation there, one as early as 1788, built by Edward Ridgeley, Thomas Cromwell and George Ashman, and a second built by Colonel John Patton and Colonel Samuel Miles, both officers in the Revolution in 1791. Other furnaces followed, and since the ore from that section produced a high grade of iron, with the building of the Pennsylvania canal the ore was more extensively transported to Pittsburg. The metal from these far distant furnaces had been hauled to Pittsburg on wagons before the canal was built. In 1814 William Leckey advertised for ten to fifteen wagons to haul iron from the Juniata and Bellefonte works to Pittsburg. The product was advertised as Juniata iron, and brought the highest price in the market. For this reason the proprietors adopted the name Juniata for their iron works and nail factory. A wire mill advertised that its wire made from Juniata iron was as good as the best English product. Juniata iron was formerly carried on pack horses to the Clarion river, and then floated down to Pittsburg. Still later it was hauled in wagons over the Frankstown road to Johnstown, and then brought down the Conemaugh and the Allegheny rivers to Pittsburg. Much of the bar iron used here came from the Barree Forge on the Juniata, in Huntingdon county. It came here bent in the shape of the letter U so that it would fit over the backs of pack-horses.

In 1819 business had revived and a rolling mill was built on the Monongahela river. It was operated for ten years when it was badly damaged by the explosion of a boiler, after which it was not rebuilt. The machinery was set up in a mill in Covington, Kentucky. The mill in Pittsburg had four puddling furnaces, the first built here, and it was probably the first mill to roll bar iron. It is also claimed that the first angle iron rolled in the United States was rolled in this mill by Samuel Leonard, who also rolled "L" iron, then used for salt pans. Still another mill was located on the ground later occupied by the works of Spang, Chalfant & Company. This was built by Belknap, Bean & Butler. In 1820 they were making scythes, sickles, etc., but in 1824 they enlarged their works and by adding steam they were enabled to roll iron. The works were operated by M. B. Belknap in 1826, and then were sold to Cuddy & Leddie, and to H. S. Spang in 1828, who made bar iron, supplying the mill with Juniata blooms. William B. Hays and David Adams built a rolling mill on Grant's Hill in 1821. Its location was near the ground now occupied by the court house. They hauled water for the boiler from the river. Dr. Peter Schoenberger erected the Juniata works in 1824. Robert

T. Stewart and John Lyon, in 1825, built the Sligo rolling mill. It suffered a loss by fire the year it was built, but has been almost in constant operation. An iron works in Kensington was built in 1825 by George Lewis and Reuben Leonard. The close of the first quarter of last century saw Pittsburg pretty well filled with iron industries, and well on its way to become an iron center. It had before this been called the "Iron City," and the "Birmingham of America." Again we quote from Cramer's Almanac for 1826, to show the standing of the city in the iron business then:

"The manufacturers of Pittsburg, particularly in the article of iron, begin to assume a very interesting aspect. Not less than five rolling mills are now in operation, and a sixth will soon be ready for various manufactures of iron. Four of the mills are capable of making iron from the *pig*, besides rolling, slitting and cutting into nails. The other (occupied by Mr. R. Bowen, formerly by the Messrs. Whitings, and owned and built by Mr. C. Cowan), is engaged only in rolling bar and boiler iron, and cutting nails. The fuel to supply the engines, the metal and other materials required in conducting the operation of these works, and in their repairs, it is computed, afford employment to upwards of fifteen hundred people, the value of whose labor may be estimated at fifteen hundred dollars each per annum, or two million, two hundred and fifty thousand dollars, while the total product may be estimated at three millions of dollars! How important an addition to the national wealth in this section of the Union! Great credit is due to Messrs. Baldwin, Robinson & McNickle for their perseverance in establishing this important branch of business, and for bringing it to that perfection which it has attained. Great facilities are now afforded to mechanics in all the various branches of smith work and hardware by the preparation of iron into whatever shape (slit, rolled, square or round) that may be required for any particular description of work. It is generally believed that no other place in the Union affords greater advantages for the extensive manufacture of anvils, vices, and all kinds of iron work. The competition which at present exists, and which is increasing by the erection of new works, will insure a plentiful supply of iron and nails for the western states, of an improving quality, on better terms than they can be procured from the seaboard."

Over in Allegheny the Juniata rolling mill was built in 1827. The Juniata iron works, built in Pittsburg in 1824, had no connection with it. One of the honored citizens of Allegheny City, Judge John E. Parke, who died at seventy-eight in 1885, has left an interesting account of this mill in his "Recollections of Seventy Years." "The Juniata rolling mill was built on the lot extending from Robinson street along the west side of Darragh street to the Allegheny river, at the former outlet of the Pennsylvania canal, by Sylvanus Lathrop, James Anderson and Henry Blake in the years 1826 and 1827. Mr. Blake sold his interest to Captain William Stewart and Messrs. Lathrop, Anderson and Stewart sold out their interests in 1834 to John Bissell, William Morrison and Edward W. Stephens. The mill having been constructed for the exclusive use of Juniata blooms, was extended by the latter firm to the manufacture

of iron by the puddling and boiling process, and was the first boiling furnace erected in Allegheny county. Here, too, was also erected the first coffee-mill squeezer, under the personal superintendence of the patentee, Mr. Burden, of New York. The manufacture of iron, nails and steel of the lowest grade was successfully carried on by the latter firm and their successors until 1859, when it was deemed advisable to dismantle the works. The machinery was sold to Messrs. Reis, Brown, Berger, and James Ward, and was removed to Niles, Ohio."

At the close of the first quarter of the nineteenth century Pittsburg had surpassed all other parts of the West in the production of nails. A patent nail machine had been introduced extensively, and it had revolutionized the manufacture. Some of the factories were built in connection with the rolling mills. That was the age of pounds in iron, not tons as we are accustomed to now. S. Jones in his "Pittsburg in 1826," gives the following as the names of the mills and their product:

Name.	Pounds.	Value.
Union Rolling Mill	720,000	$43,200
Sligo Rolling Mill	400,000	32,000
Pittsburg Rolling Mill	782,887	86,544
Grant's Hill Mill	500,000	30,000
Juniata Hill Mill	500,000	40,000
Pine Creek Mill	457,000	34,100
Eagle Mill	600,000	36,000
Miscellaneous	360,000	28,800
	4,319,887	$330,644

From the same authority and for the same year, we take the following as the published product of the mills in iron:

Name.	Employes.	Tons iron used.	Value.
Union Rolling Mill	100	1,500	$150,000
Pittsburg Rolling Mill	21	500	70,000
Sligo Rolling Mill	30	900	99,000
Juniata Iron Works	60	800	88,000
Grant's Hill Works	30	900	67,000
Pine Creek Rolling Mill	40	600	85,000
	281	5,200	$559,000

Walter Forward, the great lawyer of Pittsburg in his day, had addressed a large audience in the court house on December 28, 1816. In speaking of the rapidly growing iron business of Pittsburg, he said, that the iron interests were then consuming about 1,800 tons of pig iron; that the business employed about 150 hands, and that the product was valued at $250,000. Of wrought iron there was annually worked up about 2,000 tons, the products from which

were, according to the best estimates, worth about $1,300,000. The *Gazette,* referring to the boasted figures of the great lawyer fifteen years after the address was delivered, said: "We are assured that the consumption of iron in and about Pittsburg now exceeds 18,000 tons, and still rapidly increases."

Packard & Estep had factory which was being operated by Barnet, Shorb & Company, and they were making a grade of farming tools of which they were very, very proud. They made a spade, a shovel, an ax, a hoe and a carving knife and fork, all of a high grade, and sent them to Henry Clay, who was then at his home in Ashland, Kentucky, sending them in March, 1831. They sent them as a "token of our high regard for your private character and eminent public services, and as a sample of the many good effects produced by that policy of which you have been the able and untiring advocate. The iron was made under our personal inspection, and the steel in our convertory." Mr. Clay had advocated a high tariff, a doctrine which always pleased Pittsburg manufacturers. He responded in a letter written in his own happy and patriotic style.

Five iron firms, viz.: Shoenberger & Son, Barnet & Shorb, Mason, Miltenberger & Company, H. Blake & Company and H. S. Spang & Sons, in May, 1830, issued a publication which set forth the products they were making, and gave also a schedule of prices, the latter being subject to a discount of five per centum for cash, and it intimated a still larger discount on large orders. The schedule was as follows:

Bar iron, per ton	$110 to $115
Square iron, per ton	110 to 160
Round iron, per ton	110 to 170
Hoop iron, per ton	120 to 145
Sheet iron, per ton	175 to 190
Fire-bed iron, per ton	160
Boiler iron, per ton	115 to 145
Cooper's iron, per ton	150 to 180
Nailrods, per ton	125
Nails and spikes, per pound	6 to 9 cts.

Mason, Miltenberger & Company operated the Pennsylvania Rolling Mill in 1829, which was built some years before in Allegheny. They manufactured and kept for sale rolled, bar, round, square, sheet, boiler and fire-bed iron, and also deck spike and rail rods, and all sizes of nails, spikes, brads, etc. George Miltenberger was superintendent of the mills, and his partners were Matthew Mason and Ignatius McDonough. The Juniata iron works at Pittsburg was owned and operated by P. Shoenberger & Son, kept practically the same kinds of iron, and sold it at the following prices:

Iron, bar, Juniata, per ton	$120
Iron, rolled, per ton	$90 to 95
Iron, planished, per ton	100

Iron, short, per hundred	$10.50
Iron, pig, per ton	30
Iron, rod irons, per pound	.06
Iron nails, per pound	$ .06 to .10
Axes, per dozen	14 to 16
Steel, per pound	.08 to .09

The Juniata iron works were somewhat noted in their day. They were on the Allegheny City side of the Allegheny river, and on the east side of the canal as it approached the river. The owners were James Anderson, Sylvanus Lathrop and Henry Blake. They had the largest engine then in the West, 110 horse-power, and they employed 160 hands. They rolled 1,500 tons of blooms into bars, boiler and sheet iron, and also turned out each year about 400 tons of nails. The *Gazette,* in a resume of the iron business of 1829, says:

"Upon diligent inquiry we learn that there are consumed annually in the different foundries, rolling-mills and steam engine factories in and about Pittsburg, 6,000 tons of blooms and 5,000 tons of pig metal. These articles are brought principally down the Monongahela and Allegheny rivers. Last year considerable quantities were brought up from Ohio and Kentucky, and contracts have lately been made for a large quantity from Tennessee. There are nine foundries which use about 3,500 tons of pig metal and employ about 225 hands. The rolling mills are eight in number, and are now chiefly employed in rolling Juniata blooms, of which they use about 6,000 tons. They also consume about 1,500 tons of pig metal and employ about 320 hands. There are nine nail factories, which manufacture daily about eighteen tons of nails, and employ about 150 hands. There are also about seven steam engine factories, in which are employed 210 hands. As yet but three steam engines have been sent east of the mountains, four or five to the northern lakes, and one to Mexico. Within two or three years past the casting of sugar-kettles, sugar-mills, and small steam engines to drive them, for planters in Louisiana, has become a very important branch of our manufacturing business, and is increasing. In addition to the metal and blooms above mentioned, a large quantity of bar-iron is brought to Pittsburg from Juniata."

These works used a great quantity of iron for their day. It was brought here in part from the Juniata furnaces, but was largely secured from furnaces from the adjoining counties of Beaver, Butler, Fayette, Westmoreland, and even from Venango and Crawford counties. It is reported that 5,000 tons per year came from these latter counties. Pig iron was then worth $28 to $30 per ton. Juniata bar-iron, $120 per ton; rolled iron, $90 to $95 per ton; steel from 9 to 12½ cents per pound; nails 5 to 8 cents per pound. The *Gazette* in January, 1827, says that the whole amount of foreign iron annually brought into the United States does not exceed 30,000 tons, an amount which it rather boastingly says can be produced by fifteen good American establishments. Of the imported iron English, it says, is the worst. It adds: "American iron regulates the market, and is sold in Philadelphia at $100."

In 1836 there were eighteen iron works establishments here, which employed over 1,000 men in the manufacture of all kinds of material from boilers, engines, cannon, etc., down to the smallest of household implements. The manufacture of iron steam-boats was beginning. A small one named the "Codorus" was built in York, Pennsylvania, in 1824. It was put on wheels and hauled to Marietta, where it was used for a short time on the Susquehanna, but in the shallow stream it was not a success. It was then brought to Pittsburg and was used on the Ohio river and farther south. Soon after this iron boats were built here and were successful. The first was the "Valley Forge" with a deck 160 feet long, and the breadth of beam was twenty-five and one-third feet. It was a success, and led to the building of many others. In 1845 the Tomlinson iron ship-yard was a very important factor among the iron industries of the city. It gave employment to 150 men. Tomlinson built an iron revenue steamer named "Walker," a sea steamer named "Hunter," and the steam frigate "Allegheny," all in 1845-46. An iron steamer, "Michigan," for lake service, and an iron schooner for ocean service were built in these yards by order from the government in 1842. Canal boats were also built of iron in Pittsburg, and were successful. The modern iron ship business is not, therefore, a new feature of navigation, though for some reason the construction was abandoned early in the fifties, and not much attention given to the subject till 1872, and shortly after that when the United States began to construct a navy. The credit of engaging early in the business is nevertheless due to Pittsburg iron workers. The tarif of 1842 added strength and new life to the industry in Pittsburg and elsewhere, but the reduction made in the tariff of 1846 had the opposite effect. It enabled English manufacturers to sell their product here. This was in part due to unusually hard times and correspondingly low wages in Europe. At all events it was greatly against Pittsburg iron workers. The tarif of 1842 placed a duty of 61 per cent. on sheet and hoop iron, 109 per cent. on pig iron, 49 per cent. on scrap, bar and rolled iron, 76 per cent. on bar hammered, 87 per cent. on chain cables, and 42 per cent. on many small iron products. The tariff of 1846 reduced the duty on all these articles to 30 per cent.

The National Ironmasters' Convention was held in Pittsburg in November, 1849, and assembled iron producers from every section of the United States. They remained in session several days, and almost every speaker denounced the tariff of 1846. Their resolutions discouraged the importation of foreign labor and recommended many measures to congress, which they thought likely to benefit the iron business. Judges Wilkins and Shaler both addressed the convention. At the close of the meeting the citizens of Pittsburg tendered them a splendid supper, which was presided over by Judge Wilkins. In 1850 came the first serious strike among iron workers in Pittsburg. The operators thought a reduction of wages necessary, and the puddlers, boiler-makers, etc., refused to work under the reduced wages, and also attempted to prevent new workmen with which the country abounded from tak-

ing their places. On February 16, and again on the 18th, the strikers marched through the city to the music of bands, and with banners flying, made indeed a fine demonstration, and one which indicated great resolution and strength on their part. Under the tariff of 1842, the wages had been raised 20 per cent. This was paid under the tariff of 1846, till 1850, when the manufacturers reduced the wages which reduction brought about the strike. Graff, Lindsay & Company, the Shoenbergers and Baily, Brown & Company, started their works on the 18th with new men. This still further aroused the wrath of the strikers. They kept up their demonstrations till February 28, when a large number of strikers and their wives and daughters made an attack on the works belonging to Graff, Lindsay & Company, and drove the new employes from the establishment. They then went to attack the other factories that had started up with new men, but the owners, having learned of their first attack, were prepared for them, and they did not gain an entrance. The sheriff took charge of the works to guard them, and threatened to have the militia called out. He arrested a number of the leaders among the strikers, both men and women, and they were tried before Judge McClure and convicted. Two of the leaders were sentenced to 18 months imprisonment. In the end the strikers gained nothing and were glad to go to work for the reduced wages, where their places were not filled by new men.

The *Commercial Journal* of August 30, 1850, quotes from the *Niles Register* of May 28, 1814, which boasted of Pittsburg's product being valued at $2,000,000. It had also boasted that in that year, 1814, 4,000 wagon loads of material were brought from the East. This, the *Journal* thought, would amount to 8,000 tons, an amount which was often in 1850 sent down the Ohio river in one week. The *Journal* estimated the annual output of the Pittsburg factories, including not iron alone, but all commodities, at $60,000,000. The 365 tons of iron produced in 1812, "have an exceedingly trifling look when compared with the thousands and thousands of tons of bar-iron and nails alone turned out now by our fifteen rolling and slitting mills."

Fahnestock's Directory for 1850, gives but thirteen rolling mills instead of fifteen. It credits them with an invested capital of $5,000,000, and with employing 2,500 hands. "These mills consume about 60,000 tons of pig metal, and produce bar-iron and nails amounting to $4,000,000 annually." It says there are thirty large foundries and a great many smaller ones, having in all a capital of about $2,000,000, and that they employ 2,500 hands. The foundries consume 20,000 tons of pig metal each year, and produce articles valued at $2,000,000 annually. It notes that there are two establishments engaged in the manufacture of locks, latches, coffee-mills, patent scales, and many other castings from malleable iron. These two establishments have a capital of $250,000, and employ 500 hands. They consume 1,200 tons of pig metal and their product amounts to $300,000. It credits the city also with a large number of manufactories of the smaller sizes of iron implements, several factories which make axes, hatchets, spring steel, axles, anvils, vises, saws of all kinds, gun-

barrels, shovels, spades, forks, hoes, tacks, brads, etc. It further notes an establishment making cast, shear and blister steel and files, all of a superior quality, and "a great variety of manufacturing establishments not enumerated in our list." It speaks of one copper smelting establishment, which produces 660 tons of refined copper each year, valued at $380 per ton, amounting to $250,000. A copper rolling mill is also enumerated, which produces 300 tons of sheeting and braziers' copper, amounting to $150,000 each year.

During the decade between 1850 and 1860, the iron business was very dull in Pittsburg, for reasons which we have indicated above, and also because of the panic of 1857, which was felt severely here because the city depended largely on the iron trade. In 1851-52-53 and 1854, there were about eight millions of dollars worth of railroad iron imported annually by the United States. This, of course, gave the railroads cheaper iron, but it bore heavily on the iron producing sections, particularly on Pittsburg. The *Journal* on February 28, 1855, says that "The rolling mills have been languishing, the fires in our furnaces going out, and the ruin so long impending has at last come down upon our heads." We say this bore particularly hard on Pittsburg, for the iron manufacturers had just begun with the railroad building of 1850, to make railroad iron. It was an experiment, and required new and expensive machinery, which could be operated only by skilled workmen who demanded high wages. They had scarcely begun the business until the hard times of 1857 came.

It will thus be seen that prior to 1830 Allegheny county had eight rolling mills, all of which would now be considered to be located in Greater Pittsburg. These mills in 1829 consumed 600 tons of blooms and one-fourth that many tons of pig iron, and not a ton of it was smelted in Pittsburg. In the same year there were nine foundries using 3,500 tons of iron. A rapid increase is shown in the production of rolled iron in the late twenties. In 1828 the output was 3,291 tons; in 1829 it was increased to 6,217 tons, and in 1830 it was 9,282 tons. In 1836 there were nine rolling mills in operation. Though this does not show a rapid increase in number, the increase was in the size of the mills, and in the output. The statistics of the same year show eighteen foundries and machine shops. In the next twenty years, viz., in 1856, there were twenty-five rolling mills in the county, nearly all of which were in Pittsburg or its suburbs. In all these years not a pound of ore was smelted in Pittsburg. With the building of the turnpike from the East, pig iron was more easily transported from the Allegheny mountain regions. The supply of ore there was thought to be abundant for that day. Because of its paucity in iron and its great weight, it was smelted as near the ore mines as possible, and the pig iron was taken to Pittsburg on wagons. The building of the Pennsylvania canal gave another impetus to the iron trade in Pittsburg, for on it were brought many thousands of tons of blooms from the Juniata valley, as well as pig metal from less remote sections.

When George Anshutz abandoned his furnace in 1794, the smelting of

ore in Pittsburg seemed to be doomed. No iron-master after him even attempted it for sixty-five years, though the iron business was pushed with great energy and by some of the brightest and most energetic iron-masters of the past. In 1859, however, Graff, Bennett & Company built Clinton furnace, and put it in blast late in October. Coke had in the meantime been manufactured to some extent near Connellsville. The builders of the Clinton furnace knew that they had an abundance of coal near Pittsburg, but they did not know, until it was tested, that the quality of coke made from the Pittsburg coal, as coke was then made, differed widely and was greatly inferior to that of the Connellsville seam. They very soon made this discovery and brought their coke from Connellsville, after which the furnace was managed with a success which, for that day, was marvelous. Other furnaces were subsequently built in and near Pittsburg. Railroads had supplanted both the pike and canal as a means of transportation of ore. In less than a quarter of a century Pittsburg surpassed all other districts in the United States in the production of pig iron, and has since then more than maintained this supremacy. But before considering the more modern iron interests of Pittsburg, other matters which made them possible must be looked into.

CHAPTER III.

The Modern Development of the Iron and Steel Trade—Henry Bessemer, William Kelly—The Lake Superior Ore Mines.

The most causal observer of the present age, accustomed as we are to figures which seem almost fabulous in the product of iron and steel, cannot but marvel that the meager product of Pittsburg as represented above, should entitle it to a front rank in the industry, or earn for it the enduring name of the Iron City. Yet the iron business of Pittsburg of that day is undoubtedly portrayed in as bright a light as the truth will admit. The sequel to it is that all branches of the iron and steel business, both in Europe and America, have made wonderous strides in the last half century, surpassing, indeed, in their expansion and development all other industries of the world's history. This unprecedented increase was mainly due to three causes. The first of these was the invention known as the Bessemer Process, an economical method of converting metal into steel. The second was the building of railroads, and the third the discovery of immense deposits of iron ore in the Lake Superior and other northwestern regions. If a fourth reason were asked it might be called the inventive genius of modern times, but as this usually accompanies necessity, it is scarcely fair to mention it here. To appreciate the present standing of Pittsburg as a factor in the production of the iron and steel of the world, it will be necessary to examine briefly these three agents of modern progress in that direction.

The Bessemer process, usually regarded as an invention of Sir Henry Bessemer, whose name it bears, may be briefly described as a method of blowing cold air into a converter, a pear-shaped vessel which has been partly filled with molten cast iron. By this process the oxygen of the air forced through the hot iron, produces the most intense heat known, and eliminates from the bubbling mass of iron the carbon and silicon it contains, and produces decarburized and desiliconized iron, known generally as malleable iron. Some carbon, however, is required to produce steel, and a small quantity in the form of manganiferous pig iron, called also spiegeleisen or ferro-manganese, is added to the molten metal while seething in the intense heat in the converter.

In this way the requisite amount of carbon is obtained. The manganese also unites with and liberates the oxygen that remains in the converter. The material remaining in the converter when cooled is called Bessemer steel. The Bessemer process consists in creating this immense heat by the agency of cold air without any additional fuel whatever. The converter of these days holds from thirty to fifty tons, and it is charged with molten iron directly from the furnace or from a cupalo in which it has been melted.

Henry Bessemer was born in 1813, and was an inventor as his father before him had been. The son became an engraver, and had made some rather important inventions, but they were not such as would indicate a technical knowledge of the iron business nor any knowledge of metallurgy. In 1854 he began to experiment in the manufacture of iron, his purpose being to invent certain improvements in gun-making. There was a general complaint that the metal from which cannon were cast was both brittle and expensive, and Bessemer sought to overcome these difficulties. The usually accepted authorities on the subject set forth that in the midst of his experiments "it dawned upon him that cast iron might be rendered malleable by the introduction of atmospheric air into the fluid metal." He met with many discouragements, and was called a crazy Frenchman by English iron-masters, when they were told that he proposed to make malleable iron and steel from molten metal without additional fuel. He had had considerable experience in securing patents, and as he perfected his steel-making invention he had patents granted him in 1855 and 1856. In 1858 the invention was completed and patented in England. He had succeeded in converting cast iron into steel without additional fuel, and then the British steel-makers awoke to the fact that he was not, after all, a "crazy Frenchman." Being naturally an inventor of machinery, he applied himself at once to building machinery by which his invention could be applied. He was an engineer by nature and by study, and in the invention and construction of this machinery, he was quite at home. Those who have seen a converter with its molten contents weighing forty or fifty tons, moved at will by the touch of one finger, and who have seen forced into it by the same delicate touch, a blast of air strong enough to heat every particle of its contents to the highest temperature ever produced in mechanical arts, cannot fail to have the highest respect for the inventive genius of Henry Bessemer, so far as machinery is concerned. For his cold air invention mainly, he was knighted by Queen Victoria, and will ever be known in history as Sir Henry Bessemer. The machinery as seen now, has been greatly improved by both European and American inventors, but the honor of its original invention and construction is due to him. His success with the process which bears his name was not achieved by his own genius. In this he was assisted by Robert F. Mushet, of England, and by Goran Frederick Goransson of Sweden, and without their inventions, particularly that of Mr. Mushet, the Bessemer process by that name in all probability would never have been heard of.

One of the most interesting features connected with the early history of the present steel industry, is the story of William Kelly, and his invention of the same pneumatic process of refining iron several years before Bessemer thought of it. Particularly is it fraught with interest to Pittsburg people, for in this city he was born and brought up, and acquired a taste for the great industry which even in that day was making a name for the city throughout the world. Early in life he engaged in the iron business in Kentucky. He was not primarily an inventor, but should rather be classed among the more intelligent manufacturers, who studied chemistry, metallurgy and kindred subjects as applied to the manufacture of iron. He was perhaps more imaginative than the sturdy business as carried on in that day demanded in its most successful operators. Middle life found him engaged in a series of experiments, the object of which was the discovery of a better and cheaper method of making steel. It is not pleasant to contemplate that, though Kelly is scarcely known in the iron world as a leading inventor, yet that nearly seven years before Bessemer was heard of he had discovered and put to successful use all the elements of the Bessemer invention, and that because he was not vigilant of his rights and selfish in their use, the credit and the profits of this, the most potent invention yet made in the iron industry of the world, have been largely taken from him and given to Mr. Bessemer. For centuries it had been known that by expelling the impurities from cast iron by heat, a product known as malleable iron or steel could be produced. The only method known to iron-masters by which this could be done was by excessive heat, which, they thought, could be produced only by a lavish use of fuel. It had usually been done by placing an abundant supply of charcoal in the furnace with the metal to be refined, and then by turning on a strong blast from below, this mass was heated to a temperature sufficiently high to convert the impurities into volatile matter, and expel them from the iron. But this was a very slow and a very expensive process. The expense of making steel in that way entirely precluded the possibility of using it in abundance in the arts and sciences as it is used with us today. It was William Kelly who first conceived the idea that cold air could be used as fuel, and that if he could force it through the molten iron, it would not only not chill it, as most iron-workers thought, but would on the contrary multiply its heat in a sufficient degree to expel its impurities and allow the pure steel to remain in the furnace. A brief sketch of Mr. Kelly's experiments and discoveries was written for Mr. James M. Swank by Mr. Kelly himself, and we cannot better lay it before the reader than by introducing it here. The sketch, which is taken from Mr. Swank's "Iron In All Ages," is as follows:

In 1846 I purchased, in connection with my brother, John F. Kelly, a large iron property in Lyon county, Kentucky, known as the Eddyville Iron Works, and the beginning of 1847 found the firm of Kelly & Company fairly under way, making pig metal and charcoal blooms. Our forge contained ten forge fires and two large finery, or run-out fires.

To the processes of manufacture I gave my first and most serious attention, and, after close observation and study, I conceived the idea that, after the metal was melted, the use of fire would be unnecessary—that the heat generated by the union of the oxygen of the air with the carbon of the metal would be sufficient to accomplish the refining and decarbonizing of the iron. I devised several plans for testing this idea of forcing into the fluid metal powerful blasts of air, after making drawings of the same, showed them to my forgemen, not one of whom could agree with me, all believing that I would chill the metal, and that my experiment would end in failure. I finally fixed on a plan of furnace which I thought would answer my purpose. This consisted of a small blast furnace about twelve feet high, having a hearth and bosh like a common blast furnace. In this I expected to produce decarbonized metal from the iron ore; but, if I failed in this, I could resort to pig metal and thereby have good fluid metal to blow into. The novelty of this furnace was that it had two tuyeres, one above the other. The upper tuyere was to melt the stock; the lower one was fixed in the hearth near the bottom, and intended to conduct the air-blasts into the metal. That portion of the hearth in which the lower tuyere was placed was so arranged as to part from the upper portion, and consisted of a heavy cast-iron draw, lined inside with fire brick, so that, when the iron was blown to nature by the lower tuyere, the draw could be run from under the hearth, and the iron taken out, carried to the hammer and forged.

I began my experiments with this furnace in October, 1847, but found it impossible to give it sufficient attention, as I had then commenced to build a new blast furnace, the Suawannee, on our property. This occupied so much of my time that I had but little left in which to attend to my new process. In the year 1851, having finished our new blast furnace, I found myself more at leisure, and again directed my attention to my experiments; and, on looking for the cause of failure in my experimental furnace, found that my chief trouble lay in the melting department, not in the more important matter of blowing into the iron, so that the question presented itself to my mind, why complicate my experiments by trying to make pig metal in a furnace not at all suited to the business? Why not abandon altogether the melting department, and try my experiments at our new blast furnace, where I could have the metal already melted and in good condition for blowing into? I fully believed that I could make malleable iron by this process. In my first efforts with this object in view, I built a furnace consisting of a square brick abutment, having a circular chamber inside, the bottom of which was concave like a molder's ladle. In the bottom was fixed a circular tile of fire clay, perforated for tuyeres. Under this tile was an air chamber connected by pipes with the blowing engine. This is substantially the plan now used in the Bessemer converter.

The first trial of this furnace was very satisfactory. The iron was well refined and decarbonized—at least as well as by the finery fire. This fact was admitted by all the forgemen who examined it. The blowing was usually continued from five to ten minutes, whereas the finery fire required over an hour. Here was a great saving of time and fuel, as well as great encouragement to work the process out to perfection. I was not satisfied with making refined, or run-out metal; my object was to make malleable iron. In attempting this I made, in the course of the following eighteen months, a variety of experiments. I built a suitable hot blast oven; but after a few trials, abandoned it, finding the cold blast preferable, for many reasons. After numerous trials of this furnace, I found that I could make refined metal, suitable for the char-

coal forge fire, without any difficulty, and, when the blast was continued for a longer period, the iron would occasionally be somewhat malleable. At one time, on trying the iron, to my great surprise, I found the iron would forge well, and it was pronounced as good as any charcoal forge iron. I had a piece of this iron forged into a bar four feet long and three-eighths of an inch square. I kept this bar for exhibition, and was frequently asked for a small piece, which I readily gave until it was reduced to a length of a few inches. This piece I have still in my possession. It is the first piece of malleable iron or steel ever made by the pneumatic process. The variability of results in the working of my experimental furnace was then a mystery which is now explained. An analysis having since been made of all the ore deposits of Suwanee furnace, they were found to embrace cold-short, red-short and natural ores. Some of the deposits showed a large percentage of manganese.

I now decided that, if I could not succeed in making malleable iron, I could turn my invention to practical account by putting up a furnace of sufficient capacity to supply our forge with refined or run-out metal, and at the same time continue my experiments as before. The difficulty here was in my blast. The furnace engine, though large and powerful, would not give over five pounds pressure to the square inch. To overcome this difficulty I built a converting vessel and placed it in a pig-bed convenient to the tapping hole of the hearth. This furnace was circular, built of boiler plate iron, was about five feet high and eighteen inches inside diameter; and, instead of blowing up through the bottom, the blast was applied to the sides, above the bottom, through four three-quarter inch tuyeres. Experience soon proved that a single tuyere an inch in diameter, answered my purpose best. In this vessel I could refine fifteen hundred weight of metal in from five to ten minutes. Should the blast prove weak, as was often the case, the tuyeres could be snuffed in the same way as in a finery fire. In this way a heavy charge could be worked with a weak blast. This furnace had an opening in the side, about nine inches square, three feet from the bottom, to run in the metal; also a tap-hole to let out the metal into a set of iron moulds such as are used about finery fires. This furnace was found to answer a valuable purpose, supplying a cheap method by making run-out metal, and, after trying it a few days, we entirely dispensed with the old and troublesome run-out fires.

Our blooms were in high repute, and were almost entirely used for making boiler plates, so that many steam-boats on the Ohio and Mississippi rivers were using boilers made of iron treated by this process some years before it was brought out in England. My process was known to every iron-maker in the Cumberland river iron district as Kelly air-boiling process. The reason why I did not apply for a patent for it sooner than I did was that I flattered myself I would soon make it the successful process I at first endeavored to achieve, namely, a process for making malleable iron and steel. In 1857 I applied for a patent, as soon as I heard that other men were following the same line of experiments in England; and, although Mr. Bessemer was a few days before me in obtaining a patent, I was granted an interference, and the case was heard by the commissioner of patents, who decided that I was the first inventor of this process, now known as the Bessemer process, and a patent was granted me over Mr. Bessemer.

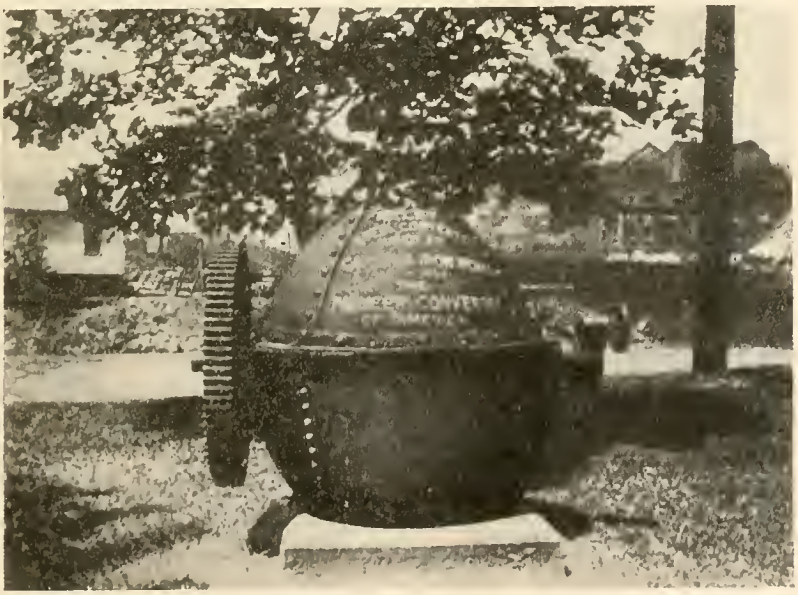
After Mr. Kelly went to Kentucky he was united in marriage with Miss Mildred A. Gracy, a daughter of J. N. Gracy, a prominent business man of Eddyville. To further the iron business he had borrowed money from his father-in-law, who became deeply suspicious that the attention Kelly was giving

to the "air-boiling process" was at the neglect of his furnaces. Mr. Gracy and other creditors at once interfered and demanded of him that he relinquish the pneumatic process of refining iron and all experiments concerning it and devote his energies exclusively to the old-time methods. After that he was compelled to work somewhat secretly in a furnace some miles distant from the main works. Though he consumed much time and money in building converters and making experiments, he made many improvements and practically worked out his great invention. During this time he had in his employ two Englishmen who assisted him in his experiments and lent him great encouragement. They were among the few indeed who did not laugh at him and think his ideas visionary in the extreme. Nothing was concealed from the Englishmen by the honest hearted inventor, for while his work was performed secretly, it was not that he feared that any one would appropriate his ideas, but to silence the growing objection of his father-in-law and others and perhaps to avoid the jeers of his neighbors, all of whom, save two, regarded him as a visionary Irishman who was in a fair way to squander all of his interests and estate. As matters grew worse, Mr. Gracy went so far as to send to Eddyville for a physician, Dr. Huggins, to treat Kelly, thinking his mind was disordered. The physician was a man of great scientific information for his day and after hearing Kelly's explanation of the process, took most kindly to it and decided that his mind and his theory were both sound. After that the physician was of considerable assistance to him. He received so little encouragement that a kind word from the physician or even from the strange Englishmen meant a great deal to him.

When Bessemer applied for a patent in the United States some years afterwards, Kelly learned of it through some means and saw at once that it was his idea. He cared perhaps very little for the benefits the discovery if patented would bring him, but objected seriously to an inventor from England taking them from him. He moved at once to have his invention patented, basing his claims on the ground that his invention preceded Bessemer's by several years. This was easily proved, and Kelly, over Bessemer, was granted the patent for the invention. It was patent number 17,628, and it confirmed his title to being the original inventor of the Bessemer or pneumatic process of making steel. The name which Kelly gave it, the pneumatic process, was a most significant one, for the process consists mainly in the use of air in place of material fuel, while the name, the Bessemer process, has no significance whatever save to indicate the egotism of the pretended inventor. Shortly after the patent was granted to Kelly, the financial distress of 1857 came, and he, like thousands of others, was unable to continue in business. He had already drawn from his father, John Kelly of Pittsburg, fully his share of the estate. To sustain his family he sold the patent to his father for $1,000. On the sudden death of the elder Kelly, the patent descended by will to the inventor's sisters, though the father meant to change his will so that the son should inherit his own patent. The sisters thought the patent would one day be of great value and refused to give it to their brother lest his creditors should seize it and perhaps fearing that

his want of appreciation of it or want of business ability would prompt him to part with it without reaping the proper advantages from it. In this way the operations under the patent were delayed some years, when finally the sisters made a legal transfer of it to Kelly's children without any material consideration.

In the meantime the inventor had laid his process before Daniel J. Morrell of Johnstown, who was one of the greatest iron masters of his day. He had gone to Johnstown from Philadelphia to take charge of the Cambria Iron Company when it was on the verge of bankruptcy, his object being to save certain eastern creditors whom he represented. He had easily shrewdness enough to see the immense value of Kelly's invention if it could be proved to be thoroughly successful. He gave the inventor a section of the yard at the iron works and a young man to assist him in preparing to demonstrate the value and the perfection of his invention. Kelly proceeded at once to build a new converter. This was really the first converter ever used in making steel, and is yet preserved by the Cambria Iron Company as one of its greatest relics. The inventor



THE FIRST CONVERTER

had made his experiments in brick furnaces, the best he could construct with his limited surroundings, and his results were necessarily somewhat unsatisfactory. But his genius was shown by the fact that with the advantages given him he made a converter which could be used even today were it not that the trade has far outgrown its size. He was also hampered at home by a weak blast of air, and this, as it is generally told in Johnstown, worked a failure in his first experiment there, for he asked for the strongest blast that could be made, not

realizing that the strength of the blowing engine was much greater than he had been accustomed to. The result was that a blast was turned on which was so strong that the entire contents of the converter were sent flying into the air in a fiery tornado of sparks. This apparent failure was great amusement for several hundred doubters who stood by, and who felt confident that cold air would chill rather than heat the molten metal in the converter. Yet it is a fact that Kelly always claimed that even in Johnstown the blast was not strong enough and that his partial failure was due to a want of force in applying the cold air. The workmen, many of whom would be out of employment if Kelly's invention proved a success, were rather delighted with his failure, which they spoke of as "Kelly's fireworks." It will be understood that the impurities are lighter than the iron, and are expelled from the converter first. But even now with all our improved machinery, if the blast is too strong, or if it is kept on too long, the iron itself will be blown from the converter. Nothing could discourage him. He had the faith of Abraham, and in a short time was ready for another test. The blast, it is said, was more carefully looked after this time, but the same crowd of unbelievers stood about ready to laugh at his second failure. The impurities in heated metal that must be expelled before the mass can be converted into malleable iron or steel are phosphorus, sulphur, silicon and carbon. When the cold air is forced through the converter and many times multiplies the heat of this already seething, bubbling mass of iron, these lighter substances are blown out first. It is well known now that the sparks made by these impurities are red at first, and that when the heat becomes more intense and the impurities are partly mixed with iron, the sparks become yellow, and finally when the impurities are exhausted the sparks become white, which indicates that the pure iron is coming, and the watchful ironmaker stops the blowing at once. Though Kelly was a scholar in metallurgy and had considerable knowledge of chemistry, it is probable that he did not know this, for the science of chemistry was in its infancy and he had no way of learning it. At all events, during the test, the faithful inventor stood near the converter with an anvil by his side and a hammer in his hand. As the sparks fell to the ground he ran hither and thither, picking up the largest particles after they had fallen, and pounding them on the anvil with his hammer. Every ironworker now knows that the red sparks crumble, that the yellow ones are less brittle, and that the white ones can be hammered into small flakes of malleable iron. But all of Kelly's sparks on this most important occasion crumbled for nearly a quarter of an hour, yet he was busy all the time, much to the amusement, as Mrs. Kelly has said to the writer, "of the doubting Thomases who stood around." Then finally he found one that flattened under his hammer, then another, and the eager inventor knew that the time had come for him to stop the blast. The converter was at once tilted and the contents poured out. Kelly took a small amount of the hot material, and, after cooling it, laid it on the anvil in full view of all the doubters, and hammered it into a thin plate. Every one who saw it knew that less than an hour before, when it was poured into

the converter, it was ordinary pig metal, which was not susceptible of being flattened or bent with a hammer, yet they knew that the material was entirely changed in a half hour, without a pound of fuel. They were convinced that cold air does not always chill hot metal. The operation also transformed their opinion of Kelly from that of a crazy Irishman to a man of genius.

No iron master in the country saw the importance of the invention more readily than Mr. Morrell. He induced Kelly to remain there five years, during which time a company was formed which controlled the Kelly patent. In 1870 both Kelly and Bessemer asked the patent office of the United States for a renewal of their patents. The manufacture of steel under the new process was yet in its infancy. The commissioner wisely refused Bessemer's application, claiming that he had no right to it and was not granted a patent in the first place. He, however, extended Kelly's monopoly for seven years, purely on the ground that, because of the many delays he had not yet received a sufficient reward for his invention. Kelly proved that he had only received about $30,000 for royalties up to that time. The renewal stirred up great opposition on the part of the railroad builders and steel manufacturers. Many who had been friendly to Kelly and who had advocated his claims over Bessemer's, now that his right to royalties was extended seven years and Bessemer's were expired, turned against him and claimed that Bessemer was the only true inventor of the process. This unjust accusation, coming when the steel business was rapidly increasing in America, was one reason why Kelly never received the credit due him as the real discoverer of one of the most important inventions in the world's history. His claim is not disputed now, not even among English writers. Mr. James M. Swank of Philadelphia, the most reliable and enlightened authority in the world, either of the past or present, on the production of iron and steel, says: "The claim that Mr. Kelly discovered the pneumatic principle of the Bessemer process several years before it dawned on the mind of Mr. Bessemer cannot be impeached." Mr. Swank, however, gives Bessemer his due credit as the inventor of the machinery by which the pneumatic principle can be applied.

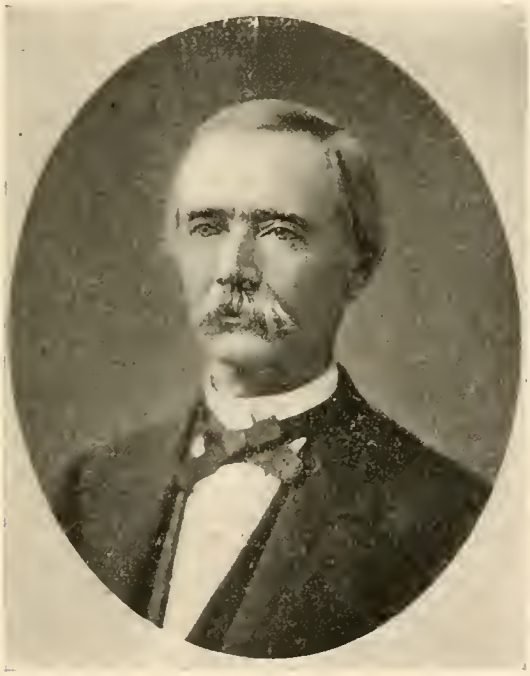
While Kelly patents were thus under the control of Daniel J. Morrell of Johnstown, E. B. Ward of Detroit, William M. Lyon and James Park, Jr., of Pittsburg and other prominent iron workers of the United States, Mr. Kelly still retained an interest in the profits which might accrue from them. The great difficulty in making steel by the pneumatic process so far was to retain the necessary amount of carbon in the converter to make good steel and not to retain too much, for a small amount was necessary. But this difficulty was overcome by a very important invention of Robert F. Mushet, to whom we have referred. He solved the question in the simplest way, yet it baffled the inventive genius of Kelly and Bessemer and others for years, and was in reality the great reason why Kelly was not entirely successful, for it must be remembered that while he sometimes succeeded admirably, he did not always secure uniform results. Mushet's invention consisted in expelling all of the carbon

by means of the cold blast and then adding to the molten metal while yet in the converter as much as was chemically necessary to form steel. Simple as it may seem it was a most important invention and entitles Mushet to a very high rank among inventors. Without it the Kelly and Bessemer inventions were of little value.

Morrell, Ward, Park and Lyon found it necessary to procure Mushet's patent, which was assigned to them in October, 1864. In the meantime they had erected an experimental works in Wyandotte, Michigan, and in the fall of 1864 made at that place the first Bessemer steel made in any quantity in the United States. These works were located in Michigan presumably because of Captain E. B. Ward of Detroit, one of the partners in the ownership of the Kelly process, and a very important one at that, for he then outranked all others in the United States as a successful iron master so far as amassing wealth was concerned. The machinery which they used at Wyandotte in handling the converter was clearly an infringement on Bessemer's patents, which, in the meantime, had been purchased, so far as the American rights were concerned, by A. L. Hawley, John F. Winslow and John A. Griswold, all of whom were iron masters of Troy, New York. In 1865 they produced Bessemer steel at their works in Troy which they had built for that purpose. In these works they used the Kelly process and also Mushett's method of adding carbon to the melted iron, the sole right to use both of which in America belonged to the owners of the Wyandotte works. Each plant was therefore infringing on the others' patents, for it must be remembered that a patent was granted to Kelly over Bessemer in America. The Wyandotte works could rightfully use the Kelly process, but they could not succeed without using the machinery invented by Bessemer, the sole right to use which belonged to the Troy iron masters, who, in turn, could not recarbonize their iron nor even make steel by the pneumatic process without infringing on the rights which belonged to the Wyandotte people. Both companies were vigilant in guarding their rights and prolonged litigation and delay in the manufacture of steel was the best which the immediate future seemed to hold in store. There were no such difficulties in England, for there the Bessemer patents and the Mushet invention were all without opposition and the English were likely to reap a great advantage by it.

But Daniel J. Morrell was a Yankee by birth and a Philadelphia Quaker by adoption and was naturally opposed to litigation when it could be avoided. He was marvelous in his power over men and in his ability to extricate himself and his friends and their interests from difficulties. He set about to form an alliance between these two conflicting interests. A consolidation was formed in 1866 by which the rights to use the Kelly, Bessemer and Mushett patents in America were vested in Winslow, Griswald and Morrell, the first two holding for them and their friends seven-tenths of the stock and Morrell holding three-tenths for the Kelly process company. There is no doubt whatever that by this arrangement Mr. Morrell saved the iron industry from years of delay by liti-

gation, but Kelly's friends have reflected on him more or less for sacrificing their rights in order to facilitate the manufacture of iron under the consolidated patents. They think that the Kelly process company should have gotten more than three-tenths, when they controlled not only the Kelly process but the Mushet patents, as against the opposition which controlled only the Bessemer machinery, but who received the lion's share, viz., seven-tenths of the stock in the new company. The long delay was, however, obviated and for this the iron workers in America are greatly indebted to Mr. Morrell. Fees and royalties were reduced by the consolidated company so that any iron master who desired to do so could engage in the business. The royalties received by Mr.



WILLIAM KELLY

Kelly paid him but reasonably well for his invention, he having realized, it is said, about a half million dollars from it in all. These consolidated rights were held in this way until the formation of the Pneumatic Steel Association, which took over the rights and held them practically till the old patents had expired.

But the strangest part of the Kelly invention, a part which borders on the romantic, is yet to follow, and has never been made public until now as printed in this work. William Kelly, the real inventor of the Bessemer process, was a son of John Kelly, who came from Ireland and settled in Pittsburg when a boy of sixteen. Later he was married to a Scotch girl and resided on First street, between Market and Ferry, and there his son William was born on August 11,

1812. John Kelly was a very thrifty man and in the early days of the city invested his money largely in real estate, which made him wealthy for his day. His children were thoroughly educated. William was not naturally an inventor, but from his youth was a student whose mind led him into scientific investigations. His first venture in business, however, was as a commission merchant in Pittsburg, being a partner of the well-known firm of McShane & Kelly. Business connected with his firm took him often down the Ohio and into the West and South. While in Kentucky he learned of a rich mine of hematite ore. Having a natural tendency towards the study of metallurgy, to which he had given much time, and besides having been brought up in an iron producing city, he concluded to locate in Kentucky and engage in the iron business. Accordingly in 1846 and 1847 he purchased a large tract of land, fourteen thousand acres, on which was a furnace built by R. F. Cobb. He soon built another furnace called Suawanee, near Eddyville, and a forge in the same community called Union forge. Nearby the mine of ore was an abundance of timber for charcoal and he accordingly made iron with great success for a few years. There were no chemists in those days, and Kelly had therefore purchased the tract of land somewhat blindly; he soon learned that the rich ore was all on the surface and it was rapidly being exhausted. Other beds of ore on his tract of land were readily found, though none of them were so rich in iron, and they were too far away from the timber from which he produced the requisite charcoal. He was, moreover, compelled to rely on slave labor and this to a northerner was not only distasteful, but, with the growing sentiment against it, it was very difficult to retain slaves, particularly so near the free states. He relied mostly on hiring slaves rather than purchasing them. He also procured ten Chinamen, who proved most satisfactory, but he was unable to procure more. They were said to be the first of the Mongolian race brought to this country. The scarcity of labor and the long distance that he was compelled to haul either his ore or his charcoal indirectly led to the discovery with which his name has since been but too remotely connected. He was driven to embrace any method which would reduce the expense of refining iron. Like most discoveries this dawned upon him somewhat by accident. One day while watching the iron in his refining furnace he noticed that it was boiling after the fuel was exhausted, but while the blast was yet passing through it. "Air must be fuel," he said to himself, and that proposition at once engaged his attention. A new furnace which he built to experiment on had all the elements of a modern converter save that it was not on trunnions and could not be moved about to suit the operation.

A great deal of his iron was made into kettles, which he sold to the southerner sugar-making trade. The iron which he made by the new process was at once very satisfactory. It was preferred by the river men particularly for boiler plates where great strength was required. Among others of his customers were Shreve, Steel & Company of Cincinnati. They purchased some quantities of it, but finally, without assigning any special reason, wrote to him that

they did not want any more iron made by the "new fangled process," but wanted theirs made in the regular way or they would not purchase longer from him. The "new fangled process" became a well known and somewhat amusing phrase in the Kelly family and remains so to this day. Shreve, Steel & Co. had been extensive purchasers of steel from England. Shortly after this the two Englishmen above referred to came to work for Kelly in the iron business, and before they came had heard of his new process. They had come directly from Cincinnati and it is supposed that they were sent there by Shreve, Steel & Co. One of them was very intelligent and particularly so in the working of machinery, and furthermore was interested in learning all he could of the chemistry of iron. Both of them assisted Kelly in the iron business and were greatly interested in the air-boiling process, for being a most credulous and unsuspicious man, he did not hesitate to make the process known to them and to allow them to assist him in it. Encouragement in the matter came so seldom to him that he gladly turned to any source for it. The idea of heating iron with cold air seemed preposterous. Both of the Englishmen were profuse in their expressions as to the greatness of the discovery, saying it would revolutionize the iron business, etc.

Eddyville was a small town of 500 people, with but few strangers and the furnace seven miles away was still more secluded, so that Kelly and his family became so perfectly familiar with the two Englishmen and their faces that they would have known them anywhere. Finally the Englishmen both left the place in the night time, and left not only without any notice whatever, but gave no word of where or why they had gone. This raised the suspicion of even the unsuspicious Kelly, and he at once endeavored to look after them. There was but one way for them to leave Suawanee furnace or Eddyville except to walk, and that was by steamer. He readily learned that they had gone up the river. He then traced them to Pittsburg and thence to New York, where they were supposed to have taken a steamer for England.

Some time after that Mr. Z. S. Durfee, a Detroit iron producer, went to England at the instance of Mr. Morrell and while there learned more of the Bessemer process of making iron. When he returned to America, Mr. Kelly had become financially embarrassed by the hard times of 1857 and had removed with his family to a country home near Wellsville, Ohio. There he was visited by Mr. Durfee, who also told him of the Bessemer and the Mushet patents as he had learned of them in England. Mr. Durfee produced a photograph of the inventor Bessemer, which he had brought from London, and handed it to Mr. Kelly. Mrs. Kelly was present when the photograph was handed to him and says she was very much struck by the effect it had on Mr. Kelly. "Instantly when he saw the photograph he jumped to his feet and exclaimed, 'My Lord, Durfee, this is the Englishman who helped me with my experiments at Suawanee iron works.'" Further examination and discussion of the matter only strengthened both Mr. Kelly and his wife in this belief, and nothing could persuade them that the picture of Bessemer, as exhibited by Durfee, was not also

the picture of the more intelligent Englishman who had assisted at Suawanee iron works near Eddyville and who had sneaked away from them in the night-time. Durfee advised Mr. Kelly to go at once to London and demonstrate that Bessemer had been to America and had purloined his invention from him. Mrs. Kelly quite coincided with this advice, but there were two reasons why he did not go. The first was a lack of funds for the trip, which could probably have been surmounted, for he had wealthy relatives who would have aided him. The second was that during his entire life he had been censured for his credulity and for constantly giving away propositions out of which other men of more astute business sagacity would have realized handsome fortunes. Here then was another to be added to the already long category and this the climax of all in his incautious, credulous, if not stupid manner of guarding his own interests. The lamentable fact was that the man's spirit was badly broken with misfortune and disappointment and he had but little heart to begin to look after his rights by the long and perhaps fruitless journey to England. Nor was he financially able to engage in a long contested suit in the English courts over his rights.

He not only did not go to England, but he asked and enjoined upon Mr. Durfee and Mrs. Kelly that this matter should not be made public. He had already enough humiliation to bear without the additional censure from his friends and from the world at large, which would have been heaped upon him had they learned that he had foolishly given away the discovery which had cost him years of labor, and in a great measure brought about his financial ruin. This secrecy he continued to exact from Mrs. Kelly while he lived and she, though not enjoined to do so, sacredly kept the secret for nearly twenty years after his death. It is only now, for the first time for publication in this work concerning the birth-place of her husband, and concerning the iron business which was so greatly benefited by his invention, that she has consented that the story may be fully told to the public. It has, until herein published, been made known to no one save her son, Mr. W. C. Kelly, president of the Kelly Axe Manufacturing Company of Charleston, West Virginia.

Mrs. Mildred A. Kelly, widow of the real inventor of the Bessemer process, is now past four score years, and resides in Louisville, Kentucky. No one who feels the influence of her gentle manner and her cultured bearing, and who looks into her kindly eyes, would for a moment doubt that she had any other object in view in giving publicity to this matter than to tell the truth as it exists in her mind and to vindicate her husband's right to his invention.

At first blush it seems preposterous to assert that Sir Henry Bessemer came from England and in disguise hired himself to an honest, open-hearted American manufacturer for the sole purpose of purloining his invention. But it must be remembered that when this took place, Bessemer was not the Sir Henry Bessemer whom the world knows of today, but an unknown engraver, who was struggling for his first emoluments in the promising but elusive field

of invention. He had, moreover, in his make-up a clearly marked trait of ingratitude and injustice, else we should not, as Mr. Swank puts it, look in vain in Bessemer's account of it for any recognition whatever of Mr. Mushet's invaluable aid in perfecting the Bessemer process. Mushet was compelled to allow his patent to lapse because of his poverty before he had received any remuneration from it whatever. Mushet himself says that when it lapsed, Bessemer took it and used it at once and that his, Bessemer's, "prosperity dated from that period." These patents brought Bessemer in royalties over five millions of dollars, and at his death he was worth twice that sum. His paltry annuity of three hundred pounds to Mushet is scarcely anything else, therefore, than proof positive of his downright meanness.

William Kelly was a man of high intellectual culture and of fine personal appearance, though he was extremely gentle and unobtrusive in his manners. In his dealings with men he was so eminently fair that he rarely ever cared for himself. After some years of well-earned ease and retirement, Mr. Kelly died in Louisville on February 11, 1888.

Mushet fared badly. When his patent lapsed it was appropriated not only by Bessemer, but by steel makers throughout Europe and America as well. It is yet in use and is essential in nearly all instances in the manufacture of steel. The Iron and Steel Institute of Great Britain in 1876 awarded him the Bessemer gold medal as a recognition of the great value of his invention. He died at Cheltenham, England, on January 29, 1891, in the eightieth year of his age. For Bessemer's so-called invention he was, as we have said, knighted by Queen Victoria and is known throughout the world as Sir Henry Bessemer.

Though Pittsburg had been for fifty years pluming itself on being the Iron City, the "Birmingham of America," it was rather slow in engaging in the manufacture of steel under the new process. The first steel manufactured by the new process was, as we have said, at Wyandotte, Michigan, in September, 1864; the second was at Troy, New York, on February 15, 1865; the third was at Steelton, near Harrisburg, in June, 1867; the fourth was at Lewistown, Pennsylvania, on May 1, 1868; the fifth was in Cleveland, Ohio, October 15, 1868; the sixth was at Johnstown, Pennsylvania, July 10, 1871; the seventh was in Chicago, July 26, 1871; the eighth was in North Chicago, April 10, 1872; the ninth was in Joliet, Illinois, March 15, 1873; the tenth was at Bethlehem, Pennsylvania, October 18, 1873, and the eleventh was at the Edgar Thomson Steel Works, a new works built at Braddock, a suburb of Pittsburg, by Carnegie Brothers & Co., Limited, their first steel being made September 1, 1875.

By the Bessemer process, the steel industry as it has existed for the last thirty years in Pittsburg and all over the world, was made possible. By it more tons of steel have been made throughout the world since 1875 than was made in all the years of the world's history before that. The greatest consumer of Bessemer steel since that day has been the railroad. The first railroads in America were built with wooden scantling for rails. They were made usually

about four inches square and were later strengthened in some degree by a strap of iron nailed on top of the rail; by this the train moved more evenly and the scantling lasted longer. Sometimes, as we have elsewhere observed, the iron on the rail broke and curled up around the wheels and frequently pierced the bottom of the cars, and this gave it the significant name of "snake head." A newspaper of New York, published on May 30, 1844, printed the following notice of an accident of that charater: "Railroad Casualty—the cars on the railroad a short distance east of Rome, New York, came in contact with a 'snake head' on Saturday morning, which threw several passenger cars and the mail car off the track. The crush was tremendous, and the cars were torn to splinters, though happily no lives were lost." Another early improvement on the wooden rail was the cast iron rail. They were made heavier than the iron and steel rails which followed them and were about nine feet long. Each of these rails served the primitive railroad reasonably well in their day, but none of them could have borne the burden and speed of a single train of modern times. As railroad building increased and the business enlarged, iron rails were used, and they were a great improvement on the rails in use before. In 1849, when railroad building was in its infancy, there were 24,318 tons of iron rails made in the United States. The output of the American mills in iron rails increased with a slight falling off in 1857 and 1861 till 1872, when it amounted to 905,930 tons. After that the product decreased somewhat until 1882 for steel rails were coming in use. In 1880 there were 493,762 tons made, but this output fell off till 1884, when the output was but 24,560 tons. In 1889, forty years after they were first used, there were but 10,258 tons cast. The making of iron rails is now almost entirely a feature of the past, the reason being, of course, the almost universal use of steel rails as made by the Bessemer process. The iron rails lasted well and with them railroading made great advancements. At the Philadelphia Exhibition in 1876 the Cambria Iron Company exhibited iron rails that had been in use ten, eleven and one that had been in use nineteen years. They had not been subjected to and probably would not have withstood the heavy and rapid work of our modern railroads, yet they survived the severest wear of their time. With the same exhibit were two iron rails which had been used as a temporary bridge over a twelve-foot wide gap, the regular bridge having been washed away, and over them had passed in safety an engine weighing 57,400 pounds and the train of cars which it drew. But in 1883 the iron rail was driven from the market by the steel rail. Its durability over the iron rail had been known for some years. In 1857 one steel rail was sent to Derby, England, and laid down on the Midland Railroad at a place where the travel was so great and the trains so heavy that the iron rails then in use had to be renewed, sometimes as often as once in three months. In June, 1873, after sixteen years of use this rail was taken up, though it was not entirely worn out. During this time it was estimated that twelve hundred and fifty thousand trains, without counting detached engines, etc., had passed over it. It was the first steel rail, now called Bessemer rail, ever used on a

railroad. The result of this test between iron and steel was made known among the iron masters and railroad men throughout Europe and America and gave a great impetus to the then increasing steel trade. Almost at once the leading railroads in America abandoned the use of iron rails and took up the use of steel.

The first iron and the first steel rails laid in the United States were imported from England. American manufacturers could not at that time compete with foreign nations in the manufacture of iron, a condition which was due to several causes. First, wages of steel and iron workers were higher in the United States than they were in England or in any other European country. Second, the raw material necessary in the production of Bessemer steel was more than a thousand miles distant from the coal and coke in the United States, while it would be difficult to find them separated as much as a hundred miles in England. Third, the water transportation from any port in England to the United States was, and is yet, much less than the cost of carrying the same freight even a few hundred miles by land. Steel rails can be shipped from London to San Francisco or New Orleans cheaper than they can be carried from Pittsburg to Chicago. The London *Colliery Guardian* of January 25, 1884, spoke boastingly of the disadvantages that the United States labored under in competing with Great Britain in the following words: "The very smallness of Great Britain tells in its favour as a manufacturing country. Raw materials have to be carried comparatively limited distances, and coal, iron and labour are collected and brought together with extreme ease, while the manufactured article, when ready for exportation, has to be carried only a few miles to some convenient port. All these elements of industrial success are more or less lacking in the United States. Labor has to be remunerated at higher rates, while coal and iron have to be hauled great distances before they become available for use." These hindrances to the iron industry in the United States were not imaginary, but were stern realities, and were overcome by the American manufacturers practically by three remedies, to bring about each of which Pittsburg contributed more than any other section of the Union of its size and strength. The first remedy was by a higher tariff on imported iron, a measure in which Pittsburg's influence was enlisted and felt almost from its earliest days. In the tariff legislation affecting iron and steel, Pittsburg manufacturers bent their strongest bow and their influence was made potent, indeed, in American politics and among the national authorities in Washington. The second measure was the building of railroads from the ore mines of the northwest to the lakes, and from ports on the lakes to the iron works, and by connecting these railroads with ore-bearing steamers, which minimized the question of transportation and almost wiped out the distance between the ore beds of Lake Superior regions and the coal and coke of Southwestern Pennsylvania. This was in a great measure accomplished by Pittsburg capital. The third measure was by inventing and installing improved machinery, which enabled the iron master to make more tons of steel and iron per man employed and per ton of fuel

used than was turned out in any other country in the world. Particularly was this true in Pittsburg, where Captain W. R. Jones as superintendent of the Edgar Thomson steel works more than quadrupled the daily and yearly output of any other similarly equipped plant in the world.

But notwithstanding the new inventions by which steel could be readily and economically made from pig iron, and notwithstanding the demand for steel rails created by increased railroad building in the United States, the prominence of this country in the iron and steel business could not have been achieved without the discovery of the immense ore beds in the vicinity of Lake Superior and in the Menominee regions of Minnesota. Without these we would still be purchasing steel and iron from England or from other European countries, and Pittsburg instead of leading all other cities in the world in the product of iron and steel, would be a purchaser of iron in the shambles of Europe, and perhaps be ploddingly devoting her energies to other industries. The idea of supplying the present iron industries of Pittsburg from the stingy ore beds of Pennsylvania or from any other section save the Northwest, is preposterous in the extreme. Yet even from native ores Pittsburg could probably have held her own with other American cities or even surpassed them, because of the abundance of coal and coke at her door. The sparse ore beds of Pennsylvania and of the eastern states generally had stood us in good stead during the Revolution, and for four score years afterwards, when the manager of an average iron furnace thought he was doing very well if he turned out twenty tons of pig metal or a corresponding product of blooms per week. Aside from the Cornwall mines near Lebanon, Pennsylvania, which were poor indeed when compared with the iron mountains in the Northwest, no ore beds fitted to be called ore beds in these days have been discovered east of Michigan and Minnesota. The Lebanon mines were owned for more than a century by the Coleman family. They were worked during the Revolution and from them were cast the imperfect guns with which Washington's army was expected to and did drive the well-trained English armies back across the Atlantic ocean. Their owners realized immense fortunes from them as fortunes were then. The next richest mine in the East was on Lake Champlain in New York. Outside of these, with perhaps a bare exception in Virginia, there is no ore mine worth considering. These two mines were worked, each of them, over a hundred years, and together have yielded perhaps as much as thirty-five million tons of ore. But this would produce only as much iron as is now consumed in Pittsburg in three years.

Pennsylvania ores were moreover so filled with phosphorus that it was very difficult to make steel from them by the Bessemer process, and it was much more difficult before the invention of the Basic Process. This invention enabled the iron master to refine pig iron by the Bessemer process notwithstanding the fact that it is highly impregnated with phosphorus, but at best it adds expense to the manufacture. It was therefore absolutely necessary for the iron interests of Pittsburg that fields more prolific in the production of ore and of ore of a

better quality be found. Such fields, though unknown at that time, existed in the forests surrounding Lake Superior. As early as 1845 a man in Michigan named Everett learned from some nomadic tribe of Indians that in their wanderings in the Northwest they had seen a mountain of iron. Everett raised funds from his neighbors with considerable difficulty to investigate the story. In company with four white men and two or three Indian guides he traveled through the forests to Lake Superior and thence sailed westward in a small canoe. Landing on the west coast they again made their way through the wilderness for about sixty miles. In about six weeks of many hardships on land and lake, they found that the iron mountain story of the Indians was correct, for they pointed out to them indeed to a richer ore field than had ever been discovered before. Everett and his party had permits from the United States government which enabled them to lay claims to seven square miles of land. They staked them out so as to include as much of the ore beds as possible, and then after supplying themselves with samples of the ore they had discovered, they returned to Michigan. Four years after this the town of Marquette was founded by representatives of the Everett party, and rude docks were built from which the ore could be shipped eastward. Later it was learned by prospectors that that section of Michigan and Wisconsin was filled with ore of a very high grade. It has been said that seven hundred million dollars' worth of ore has been taken from this field alone. Everett made a fortune from his discovery, but in the end died poor. After the close of the Civil war other ore prospectors discovered the Vermilion ore mine, which lies on the north side of Lake Superior. Considerable money was spent in looking after it, but it was not worked for more than ten years, because it was so difficult of access from the lake front. In 1874 George C. Stone of Duluth took up the project of building a railroad from the Vermilion ore field to the lake. He was then without money, but laid his scheme before several wealthy iron producers in the northwestern cities, all of whom refused the proposition because of the amount of money it would cost to build the railroad and lay the necessary docks. A year later Stone laid his project before Charlemagne Tower of Pottsville, Pennsylvania, who had made several millions of dollars in the coal business, but who had never been connected with the iron trade. After some time Tower was induced to engage in it. The main outlay was in the construction of a railroad from Two Harbors on the lake sixty miles into the wilderness to the Vermilion ore fields. It proved to be a much more expensive road to build than was anticipated. In four years the road cost him almost his entire fortune, over three million dollars, and was not yet completed. Refusing to furnish further funds, Stone persuaded the Minnesota legislature to aid the scheme by land grants, which enabled him, with another million from Tower, to finish the road, and in a short time they began to ship ore to Two Harbors on Lake Superior. Tower had invested in all four millions of dollars, and after operating the road with great profit for two years he sold it for eight millions, thus doubling his money. Tower was the father of Charlemagne Tower, our pres-

ent minister to Russia, who has long been a distinguished citizen of Pennsylvania. The mine and the railroad have since become the property of the United States Steel Company. It has produced about one hundred million dollars worth of iron ore.

As if these two fields containing hundreds of square miles of ore territory of the richest quality yet known were not enough another greater than either of them was discovered in 1884. The Merritt brothers were first woodsmen and afterwards lumber dealers and after making considerable money became desirous of greatly increasing their possessions. The lumber business had taken them over much forest country and fitted them to explore unknown regions in search of timber or other valuable products. They discovered the Mesabe range, now the richest ore deposit in the world, though it is claimed that their father had known of it years before. They abandoned the lumber business. They spent years in acquiring a title to it and determining the best route upon which to build a railroad connecting it with Lake Superior. In two years more they managed to get together enough money to build a road from the ore beds to a road running from Duluth to Winnipeg in the far North. They began operations in 1892, and their property was actually worth many millions of dollars. But in a few months after they began to realize from their years of labor and investment, the panic of 1893 came. It found them unprepared, and in a few months their road and all their possessions were sold from them by the sheriff. In the Mesabe field the ore in many places lies so close to the surface that the removal of a few shovelfulls of earth will expose it to view. It is mined in the open as though it were an immense deposit of sand and they were hauling away the entire hill. In many places it is over three hundred feet thick and in one place was nearly four hundred and fifty feet in thickness. It is, moreover, not mined by blasting or digging, but by a steam shovel as though they were carrying away that much loose earth. Railroad switches are laid to the very edge of the mass to be carried away. Steam shovels were installed which can scoop up and drop fifty tons of it in a steel car in five minutes. There are other mines in the Lake Superior region, perhaps a dozen of which produce from five hundred thousand to fifteen hundred thousand tons of iron ore per year. About fifty-five per centum of the ore used in Pittsburg is from the Mesaba mine. It produces more ore than any other mine in the world. About one-sixth of the ore product of the world last year came from the Mesaba. There were mined last year about forty-two million tons of ore in the United States, of which fourteen million tons were Mesaba ore. It was fortunate for Pittsburg that this almost inexhaustible ore deposit was found in a section from which its product could be transported by water nearly all the way. The ore used in Pittsburg is brought down the lakes in ore bearing ships of steel, each of which carry from six to twelve thousand tons. So perfect and so powerful is the unloading machinery at the main Pittsburg dock at Conneaut, Ohio, that twelve thousand tons can be taken from a ship's hold in five hours. The Conneaut dock was built in 1900 by Andrew Carnegie, and now belongs to the

United States Steel Company. It is the best equipped dock on the lakes. In five hours after a large steamer reaches the dock laden with ore its entire burden can be put into cars and started on its way to the furnaces of Pittsburg. It is these discoveries of ore, rich in iron and easily mined, this ore fleet of a hundred ships of steel, which carries the metal over the lakes on its way to the Iron City, and the marvelous machinery for handling it with rapidity and economy, that have unitedly contributed so much towards making Pittsburg the center of the iron and steel industry of the new world. Back of this is the abundance of suitable fuel for smelting iron which to the exclusion of almost every other section of the Union has been deposited in the coal field which centers in Southwestern Pennsylvania. In this connection it may be well to add for the benefit of those who are less familiar with the iron industry, that to smelt ore and extract from it the iron which it contains requires an intense heat many times greater than can be produced by natural gas or by coal when not aided by a strong blast of air in the furnace.

It may be thought queer that the early manufacturer used charcoal so long when coke had been used in smelting iron ore as long as it was, for the English began using coke for this purpose long before we were separated from them by the Revolution, and they abandoned charcoal entirely before the close of the eighteenth century. The reasons for this tardiness in adopting a material which we possessed in abundance, the efficacy of which had long before been demonstrated, were various. First, there was an abundance of timber from which to produce charcoal and with it was a prejudice in favor of the iron made with it, which sold in the market as charcoal iron. In the second place many of our veins of coal, indeed most of them, will not produce a good quality of coke and the American iron workers knew nothing of its manufacture, which even now requires special skill and knowledge. In the third place it was rarely ever located near the native ore beds, and to transport it by the limited means within the reach of the early iron masters was almost if not quite impossible. Coke, therefore, until the fifties was not considered even as a probable factor in the future of the iron industry. Frederick Overman in his *Manufacture of Iron*, published in 1849, scarcely thought it necessary to mention coke furnaces, and refers to the subject in the following language: "As there is but little prospect of an addition to the number of coke furnaces which now exist we shall devote but a limited space to the subject." It is possible to smelt iron ore by using certain kinds of bituminous coal, or with anthracite coal in general. Both were used in the Pennsylvania furnaces in the first half of the eighteenth century, but like charcoal they were supplanted by the well-known modern product from bituminous coal, or rather from some particular veins of it. Charcoal iron had the lead in the number of tons produced in the United States until 1855, when it was passed by the number of tons produced by anthracite coal, but the charcoal product of metal kept ahead of the bituminous till 1869, when the latter surpassed it. In 1875, when the coke industry began to loom up, the tons of iron produced by bituminous coal exceeded those produced by anthracite coal. Since

then it has not only kept ahead, but has far distanced it in the race. Indeed, the product of iron by both charcoal and anthracite coal has so diminished since the use of coke became general that they are no longer considered its rivals, and are scarcely regarded as factors in the business of ore smelting. By the use of coke the product of pig iron was so increased that in 1890 the United States surpassed England even in her best year. This onward march has been so steady and so rapid that at present Pittsburg alone, as we shall presently see, produces more iron and steel than all of the iron interests of England, Scotland, Ireland and Wales united. The heat that may be generated from charcoal or coke by means of a blast furnace, after centuries of experiment, remains as almost the only known method by which the iron may be successfully separated from the impurities with which it is found in its original state. Charcoal for general use has long since been driven almost entirely from the market because of the scarcity of timber, and because its work can be performed cheaper by coke.

While the discovery of the pneumatic or Kelly-Bessemer process of making steel, the rise and progress of the railroad industry and the discovery of the rich ore fields in Michigan, Minnesota and Wisconsin, have unitedly made the iron business great, these agencies have done but little for Pittsburg that does not apply equally well to other sections. The abundance of fuel is therefore the main element of strength which has enabled Pittsburg to surpass all other cities in the Union in the iron business. The likelihood of the scepter being taken away from Pittsburg is extremely remote. To discover a process by which natural gas would smelt ore, or to discover a bed of coking coal in the vicinity of Lake Superior, would probably result in building extensive iron works nearer the ore beds, but these matters have been thoroughly investigated and have proved fruitless of good results.

It must not be supposed, however, that Pittsburg's prominence in the iron industry is due entirely to its location in the coal and coke fields. Its long-standing name as an iron center, which was earned nearly a century ago, its most marvelous faculties for transportation, and, above all, the intelligence, genius and energy of its operators are elements which must be reckoned if the secret of its success is to be laid bare to the reader. Since we have elsewhere considered the first two of these elements of strength, it remains for us to look briefly into the last.

The reader will remember that the Bessemer process, the increase in railroad building, and the ore mines in the Northwest all dawned upon the world at about the same time, as if they came for the sole purpose of supporting each other. The market for steel rails was followed by the demand for structural iron, iron bridges and the use of iron in many other branches of mechanics. England first demonstrated the importance of the steel rail and was first among the iron producing countries of the world in their manufacture. The industry in America, as we have seen, was retarded by a conflict of patents on the pneumatic process and the machinery for its expeditious application, while the English manufacturer was free, under prescribed royalties, to use both the Besse-

mer process and his ingenious machinery for handling it. With the usual zeal of the English race in thrusting their products on the markets of the world, their agents overran the United States in the early seventies and at exorbitant prices literally forced their products on unwilling purchasers, who had but little faith in the great advantage of steel over iron in railroad building. The Pennsylvania Railroad was the first American purchaser to experiment with a few hundred tons of English steel rails. They proved successful in a high degree, though it has been demonstrated by statistics collected by the company that the English rails were never as lasting as our American product which were manufactured a few years afterwards. The persistency of the English salesmen and the really good quality of their rails very rapidly created a demand in America for them. The years which had followed the close of the Civil war had brought about an unprecedented if not unwarranted increase in railroad building. In 1864 there were only 33,908 miles of railroad in the United States, while ten years afterwards there were 72,741 miles, the mileage being more than doubled. The annual increase in mileage, which had fallen to 738 in 1864, arose year by year until the upward movement culminated in the building of 7,379 miles in 1871. In addition to the new roads, many of the old ones needed new rails. We were not manufacturing any steel rails in America at that time. The market for English steel rails, when once created by the persistent salesmen, induced the manufacturers to ask fabulous prices for their product. Though made then perhaps almost as cheaply in England as now, the American railroad projector was compelled to pay from $130 to $170 per ton for them. Home production, therefore, became necessary, and, recognizing this, Congress imposed a duty of $28 per ton on foreign rails. This encouragement to the American manufacturer, concurring as it did with the settlements of the controversy respecting the Bessemer-Kelly patents, and the reduction of royalties under them, induced the iron masters of the United States to engage in the business. A new era in the manufacture of iron and steel was now about to dawn on the American people. In the year of 1870, which was a thrifty one in all industries, there were but 49,757 tons of steel produced in the United States. In the succeeding ten years the country passed through the panic of 1873, which lasted nearly five years and during which there were but few advances made in the manufacture of iron or of any commodity. Yet in 1880 the production of steel in the United States was 1,058,314 tons. It may be interesting to note here that in Pennsylvania in 1870 the production of steel was 35,306 tons, while in 1880 it was 590,686 tons. It will be seen therefore that the Keystone state kept pace with the industry in its marvelous strides, producing in each of the years of 1870 and 1880 more than one-half of all the steel made in this country. From an infant industry in the United States the manufacture of steel, actually struggling for an existence as it had been for a century past, suddenly became the greatest of all our industries and astonished the world by its magnitude All these economic measures and advantages contributed greatly to the iron and steel industry generally, but not particularly

to Pittsburg nor to any special locality. The steel business was open to any manufacturing community in the country if it had the capital and energy to engage in it. Pittsburg, it must be remembered, had advantages, as set forth above, but did not by any means have a monopoly of the business.

CHAPTER IV.

Iron Continued: The Iron Business of Modern Pittsburg.

Pittsburg, as we have said, was eleventh in the United States to engage in the manufacture of steel rails by the Bessemer process, beginning it on September 1, 1875. For nine years preceding this Andrew Carnegie, the most successful iron master the world has yet produced, had been engaged in the iron industry to a somewhat limited extent, for there were then many others in the city who were not only more extensively engaged in it than he, but whose labors had been rewarded with a greater measure of success. He was the son of a weaver who had come to Pittsburg from Dunfermline, Scotland, in 1848, when the future iron master was a boy of eleven. The children of the weaver found employment in the city, the oldest son, Andrew, being engaged successively as a bobbin boy in a cotton factory, a telegraph messenger boy and later as a telegraph operator. From this position he became an employe of the Pennsylvania Railroad, and soon arose to the position of superintendent of the Pittsburg division. This position he resigned in 1865, when he was twenty-eight years old, and thereafter devoted himself entirely to the iron business. While in the railroad business he became intimate in a business way with J. Edgar Thomson and Thomas A. Scott, who were successive presidents of the Pennsylvania Railroad. They were both men of a high order of business ability, and discovering an unusual alertness in Mr. Carnegie had entrusted some business matters to him from which, by his successful management, he had realized several hundred thousand dollars. He engaged in the iron business more by accident than by ambition and it is said frequently regretted that he had embarked in it at all, so meager were the profits for the first eight or ten years. Bessemer steel had been manufactured in Wyandotte, Michigan, eleven years before its manufacture was attempted in Pittsburg. To the suggestion made by Mr. Carnegie's partners that they should install a plant for that purpose, he answered that the time had not yet come and that pioneering in business was rarely ever profitable. "Wait till the business develops," said he. This was undoubtedly true, for among the ten companies which had already engaged in the business, none of them had achieved more than a moderate success, if even that. But in 1874, this shrewd, calculating young iron master,

endowed as he was with a most marvelous gift of looking into the future, concluded that the time to engage in the business had arrived. The necessary process was at hand, the mines on Lake Superior teeming with richest ores were within his grasp, and the demand for steel rails, though a short distance in the future, was doubtless clearly within the range of his remarkable vision. To him the steel rail meant much more than durability, for that had long been a matter of common intelligence among iron makers. It meant strength to endure the weight of larger engines, heavier freightage, increased speed and additional safety. He saw the wasting forests in the East, and knew that structural iron was bound to follow. He saw an inexhaustible supply of fuel peculiarly suited to the steel and iron trade hidden under the hills and valleys of Western Pennsylvania. He saw multiplied millions of money that could be and would be wrenched from the steel industry by those who would invest their capital and put forth the proper efforts, and he was impatient to engage in it.

The firm of which he was the leading member and guiding spirit was composed of Thomas N. Miller, Henry Phipps, Andrew Kloman and himself. The Keystone Bridge Company, which he organized with President Thomson and Vice-President Scott of the Pennsylvania Railroad as partners, was a much more successful adventure in the iron business. A new company with additional capital and more partners was formed. They built a mill and furnace on the ground where Braddock had met defeat 120 years before, and named it the Edgar Thomson steel works, in honor of the president of the Pennsylvania Railroad. They made their first steel, the first made in Pittsburg or vicinity, on September 1, 1875. It was a success from the first. It surpassed all other mills of its capacity in the world and then more than twice doubled its output, not by increasing its size but by the energy and skill of its managers. Mr. Carnegie himself claims but little credit for the great success of new works, but attributes it rather to William R. Jones. Without him they would probably have succeeded as other steel mills did, but it is not believed that they could have distanced all other steel mills in the world. The credit of securing Mr. Jones and of supporting and urging him in his wondrous strides is certainly due to Mr. Carnegie. Jones was born in Scranton in 1839 and brought up in Catasauqua near Allentown, Pennsylvania. He was surrounded in youth by iron works on a small scale. With but little taste for the books of the school room, he received but a moderate education, but had from his youth a taste for literature of a high grade. In his knowledge of Shakespeare and other classics of the English language he had but few superiors; this in mature years gave him a command of language in his letters and a classic expression in his conversation which far surpassed many who were much better educated than he. He was a captain in the Civil war and after that was engaged by the Cambria Iron Company at Johnstown. There he remained about eight years, though he had been employed there before he entered the army. Reckless in youth and in the war, he showed the same disposition in Johnstown, and yet he was all

the time climbing up in the management of the company and was making more and better steel than any other superintendent in their employment. George Fritz was general manager of the company then, while Daniel J. Morrell was president. Fritz died in 1873 and those who were familiar with the situation supposed that Jones, who had earned it above all others, would be made general manager. He probably would have been but for the sturdy Quaker Morrell, who could not overlook his apparent want of stability. For more than two years the Cambria Iron Company had been making Bessemer steel and Jones understood the new process thoroughly. When he was not promoted he became somewhat disgruntled at Morrell and resigned his position. It so happened at this time that Mr. Carnegie was looking for a manager for their works at Braddock, and he very gladly tendered the position to Jones. Jones was always popular with his men and when he came to Pittsburg and when the new works were ready for operation, he induced many of his most skilful workmen in Johnstown to join him. Skilled laborers, particularly in the manufacture of Bessemer steel, were very scarce and this was therefore a master stroke on his part. It enabled the new works to take the lead, even in the first month it was operated. Jones may be pardoned if he felt a personal glory in surpassing the Johnstown steel makers. In the first three months he broke all records by nearly doubling the output of similar mills. To most men this would have been glory enough, but not so with Jones, and not so with Carnegie, neither of whom were ever satisfied with present achievements when they could possibly be improved on in the future. Astounded as all were with his first work, he nerved himself for greater efforts, and actually doubled this remarkable output, making over 3,200 tons of steel in a week and making in one day 623 tons, which sold readily then at fifty dollars per ton. Jones cared nothing for the money that was in it; his sole object was to surpass the world in making steel. He had also power, in a wonderful degree, to inspire all his workmen and all men around him with the same enthusiasm and ambition to surpass all others in the business. He wrote true accounts of his work and when they were read before American and English associations of iron masters they were simply astounded at the array of figures. Sir Isaac Lothian Bell thought his work a physical impossibility. Coming from Birmingham or Sheffield such reports would have been thought visionary or fabulous, but from the back woods of America they seemed like a satire on the credulity of the English iron masters. Jones was not a partner in the works and when offered an interest because he was earning it, he refused by saying he had trouble enough without bothering himself with business cares. Mr. Carnegie then told him that he should thereafter be paid the salary of the president of the United States. He had a genius for invention and much of his success was due to this. One of his patents, the Jones mixer, is yet in use exclusively by the successors of those for whom it was built. Among iron men he has been ranked with Kelly, Bessemer, Mushet, etc., but outside of Pittsburg he is scarcely known, par-

ticularly among those who are not engaged in the iron business. Yet to him more than to any other the prominence of the iron and steel trade of America and particularly of Pittsburg should be ascribed. He not only made millions of money for those who employed him, but indirectly for all others in the business, for he set the pace of steel workers and taught the world how to make a finer quality of steel with greater rapidity and economy than was ever known by steel makers before.

In 1889, at fifty-one years of age, and in splendid health, the steel industry had promise of many years of his efficient management. On September 27, Furnace C of the Edgar Thomson works became clogged with hot iron. Jones was nearby directing a company of workmen in their efforts to remove the difficulty. With a flash the walls of the furnace gave way; the molten metal flew into the air and fell in torrents on his head and shoulders. With a quick bound he jumped back and unfortunately fell into a pit, his head striking an iron car. He was removed at once to a hospital nearby, but did not regain consciousness and died the day following. His loss was irreparable to the steel industry, but he had lived long enough to establish the Bessemer process in Pittsburg and raise it from a doubtful venture to the most stupendous industry in the United States. When he began work in Pittsburg the United States was scarcely known as a producer of steel, for in 1873 the total product of Bessemer steel ingots was 129,015 tons, while the year of his death the product was 2,930,204 gross tons. When he began to make steel rails, Great Britain was well established in the business and the United States was practically just beginning. The year he died the United States produced 1,510,057 tons, while the product of Great Britain had fallen from 1,235,785 tons in 1882 to 943,048 tons in 1889. Not only had the American product been gradually increased, but the price per ton had been reduced from the English price of from $130 to $170 per ton to $30 per ton for the American rail, while the English rail was driven from the American market entirely. We do not mean to say that William R. Jones did all this, for there were scores of others whose efforts were in the same line; but we do mean to accredit him with taking the lead in his line, with standing first in the mechanical management of the industry and with setting the pace which American steel workers have since been proud to approximate.

The spirit of rivalry among Pittsburg iron masters was very great in the early steel trade, particularly after Carnegie and Jones began their operations. The one a tyro in the business and the other a stranger in the city, it was humiliating for those who were born and bred to the guild to think they were being distanced in the race by unknown men. It was perhaps a healthy rather than a bitter rivalry, and contributed in a great measure to Pittsburg's prominence in the trade. This was shown in two furnaces, the one the Lucy furnace built by the Carnegie company in 1873, before the company had reached its prosperous years, and the other the Isabella furnace, built by rival iron interests of the city. These furnaces were very much alike in construction

and size, and the efforts they put forth to surpass each other resulted in a product which really surprised the iron producers all over the world. When the first furnaces were built in Western Pennsylvania, if they made fifty tons of iron in a month they were not doing bad, but in 1875, fifty tons a day was a fair average. Under the Carnegie management the Lucy raised the product to 100 tons per day. Iron was then selling at about thirty dollars per ton, and the sale of over $20,000 a week from one furnace was more than the slow-going iron producers of England could believe. Both Pittsburg and Carnegie were new names in the iron circles of Europe, and it is said that many of them would not believe this marvelous tale till they came to Pittsburg to see the output of molten iron for themselves. In 1877 the Carnegie company built a second furnace and gave it the same name, Lucy. Those two furnaces have been in blast almost constantly day and night since they were built, and have turned out more iron than any other two furnaces in the world's history. They have to their credit, it is said, an average of 130 tons per day for each furnace since they were first put in blast. The entire output has been over three millions of tons. This is the highest point of perfection which the iron furnaces we described in the first pages of these chapters have reached. Yet it is the result of but a few years' work. The writer has talked to a man who is yet in good health, who helped to supply the Pittsburg iron works with pig iron, which he hauled on a wagon from Washington furnace in Ligonier valley, fifty-four miles by pike from Pittsburg. It was such marvelous strides as these that gave Pittsburg her standing in the iron and steel world. The splendid work of these works was not due to any special advantage which Pittsburg had over other cities. We need scarcely say that the net profits on this product was immense. The same work could have been done in Buffalo, Cleveland, Chicago or Detroit, or in a hundred other cities of the Union with a less, though still abundant profit to the operators, had they but possessed the business shrewdness and energy of the Pittsburg iron masters. This proves, therefore, as we have said, that those who would know the main secret of success in the Iron City, must measure the brain and energy of its citizens as well as its distance from the coke field, the ore bank or the steel market.

The Jones & Laughlin Company was founded mainly by the late Benjamin Franklin Jones, and is now by far the largest independent iron establishment in Pittsburg. He was born in Claysville, Washington county, on August 8, 1824. Though of Welsh descent his ancestors, for several generations, had lived in this country. Part of his youth was spent in New Brighton, where he attended the common schools till he was nineteen. In 1843 he came to Pittsburg. He first became a clerk in the canal office of the Mechanic's line of boats, which plied between Pittsburg and Philadelphia. He gradually worked his way up until he was trusted as manager of the line, and in 1847 was admitted as a partner in the Independent line. When the railroad building age came he became interested in them and was for many years a director in the Pittsburg

and Connellsville, the Pittsburg and Cleveland and the Allegheny Valley railroads. He was also president of the Pittsburg, Virginia and Charleston railroad. In 1846 he became interested in the iron business, purchasing an interest in a furnace in Indiana county. The project succeeded barely, for almost at once came a reduction of the tariff in 1846. In 1851 he engaged more extensively in the business of making iron and gave it a half century of care and attention. The American Iron Works had been built by Bernard Lauth, and in 1852 Mr. Jones purchased an interest, whereupon the firm became Jones, Lauth & Co. In 1854 Mr. James Laughlin entered the firm and in 1857 the name was changed to Jones & Laughlin and has not been changed since, though the original partners have all passed away. From that time on, until his death, he was one of the great iron producers of Pennsylvania and did more than any other man save one, to build up the iron business of Pittsburg. Their furnaces were among the first to use Lake Superior ore; they were also very early in the Connellsville coking fields to purchase coal lands from which to make coke for their own use. Still later they drilled gas wells and laid pipes to Pittsburg to supply their works. This required forethought and we believe it was generally conceded that the reaching-out policy of of the firm originated with Mr. Jones. He was several times a member of the National Republican Convention and in 1884 was selected as national chairman. That the presidency was lost that year by the Republicans by a narrow margin, has never been attributed to him, though he was a business man, an iron master and not a politician. In December, 1884, on the death of Daniel J. Morrell, he was elected president of the American Iron and Steel Association, a position of the highest honor among iron producers, and one for which he was pre-eminently qualified. This position he filled until his death.

The Jones & Laughlin Steel Company, as founded by Mr. Jones, is the largest and almost the only large independent iron producing concern in Pittsburg. Its general offices are on Third avenue and Ross streets, and it has branch offices and warehouses in Chicago, San Francisco, Cincinnati, Buffalo, Philadelphia, New York and Atlanta. It operates the Eliza furnaces, which have an annual capacity of 935,000 tons. These with the Soho furnace gives them a total annual capacity of 1,055,000 tons of Bessemer and Basic pig iron. The Bessemer, built in 1886, have three ten gross ton converters, five cupolas, fifty-three soaping pits and one 250 ton metal mixer, the annual capacity of which is 800,000 tons of ingots. The open hearth steel department has a capacity of 15,000 tons of acid ingots and 540,000 tons of basic ingots. It has also, now in construction, four 250 gross tons Talbot basic open hearth furnaces the annual capacity of which will be 300,000 tons, which will be ready by January 1, 1908. The American Iron and Steel Works on the south side operate one rolling mill, twenty-seven heating furnaces and twenty-four trains of rolls. The company began the erection of the Aliquippa works in March, 1907. There they are erecting three blast furnaces, to be known as 1, 2 and 3. Each furnace will have a daily capacity of about 500 tons.

The Jones & Laughlin Company produce steel bars, rails, plates, sheets, structural shapes, billets, railroad splice bars and bolts, boat and railroad spikes, machine and bridge bolts, chains, railroad coupling links and pins, forging, steel castings, cold-rolled shafting, finger bars, spiral bars, couplings, hangers, pillow blocks and pulleys. Their annual capacity is 1,200,000 tons of billets and blooms and 1,000,000 tons of finished material. For fuel they use coal, natural gas and producer gas.

The Soho department produces steel plates, and has an annual capacity of 150,000 tons. The steel department has four open hearth steel furnaces, with annual capacity of 70,000 tons of ingots. The total annual capacity of the two completed rolling mills and steel works is 800,000 tons Bessemer steel ingots, 625,000 tons of open hearth steel ingots, 1,200,000 tons of steel billets and blooms and 1,150,000 tons of plates, sheets, structural shapes, bars, rails, railroad splice bars and other finished rolled material. The spike, rivet and

JONES & LAUGHLIN WORKS

bolt departments, produce structural and tank rivets, boiler rivets, etc., with an annual capacity of 8,930 tons.

Structural material fitting shops are equipped with special machines for fabricating all kinds of structural material, especially for "steel skeleton buildings," floor framing and steel columns. Its annual capacity is 30,000 tons. These shops are being moved from the South Side to the former site of the old Keystone Rolling mill, on the north side of the Monongahela river. The annual capacity will be increased to about 50,000 tons. The chain factory and iron and steel foundries produce iron and steel proof coil, dredge chains and close and stud link cable, railroad brake, switch and safety, agricultural, conveyors, log and binding chains. The foundry department produces iron and steel castings, and has an annual capacity of 15,600 net tons of iron and 5,400 net tons of steel castings.

Cold rolled and cold drawn department produces cold rolled and cold drawn steel rounds, squares, etc., and has an annual capacity of 30,000 tons cold rolled and 45,000 tons cold drawn steel products. The forge and machine

shops produce forgings for large shafts, housing screws, piston rods, connecting rods, etc., all made of steel with an annual capacity of 3,000 tons. The machine shop can produce pulleys and balance wheels up to 30 feet in diameter and handle masses weighing fifty tons.

The Jones & Laughlin Steel Company owns the capital stock of the Interstate Iron Company, and the Leetonia Mining Company. They have a number of mines on the Mesabe range in the Lake Superior iron ore region. They own the Jones & Laughlin Ore Company, which operates the mines in the Marquette and Gogebic ranges. The combined output of all the mines annually is about 1,800,000 tons. The company owns about 1,000 acres of land near Aliquippa, Beaver county, upon which its new Aliquippa mine works are being built. The company also ownes the Vesta Coal Co., controlling about 20,000 acres of land land in Washington county, in the fourth pool of the Monongahela river. The annual capacity of its mines is about 2,500,000 tons coal. The company also owns and operates 1,898 bee-hive coke ovens at Pittsburg, with an annual capacity of 1,330,000 net tons. About 900 bee-hive ovens with an annual capacity of about 487,000 net tons of coke will likely be erected at Aliquippa. The company also has an interest in the Blair Limestone Company, which owns about 85 acres of limestone land near Hollidaysburg, Pennsylvania, with an annual capacity about 600,000 tons. It is interested largely also in Angeline Dock Company, at Ashtabula, Ohio. Other subsidiary concerns, which it owns, are Interstate Steamship Company, which owns ore-carrying steamships—"B. F. Jones" and "James Laughlin." The approximate ore-carrying capacity of the two vessels per season is 450,000 tons.

The Westinghouse group of industries, in its employes and products, rank among the greatest on this continent, and is located chiefly in the Greater Pittsburg district. The Westinghouse Air Brake Company was organized in 1869, and now is capitalized at $11,000,000. Its employs about 4,500 men at its principal works, which are at Wilmerding. The floor space of their factory covers fifteen acres. Their product consists of air brakes, compressors and friction draft gear for steam railroads, and air compressers for general use. The Westinghouse air brakes have long since became the standard on all the principal railroads in the world. The Westinghouse group of industries consist of thirty-five companies with an aggregate capitalization exceeding $125,000,000 and with factories covering an aggregate floor space of two hundred acres. Of these companies, twenty are located in the United States, one in Canada, six in England, one in France, two in Germany, two in Russia, one in Austria and two in Italy. Their chief products are electrical apparatus of all kinds, prime movers, embracing steam and gas engines, and steam turbines; breaking and signaling apparatus for steam and electric railways; electric lamps, embracing arc, incandescent and mercury vapor lights; gas producers and automobiles, the latter being made in France.

In the "Pittsburg District" the following plants are located: Westinghouse Electric Manufacturing Company, the Westinghouse Machine Com-

pany, Westinghouse Air Brake Company, Westinghouse Traction Brake Company, the Union Switch and Signal Company, Pittsburg Meter Company, R. D. Nuttall Company and the Nernst Lamp Company.

The Westinghouse Machine Company was organized in 1881 and its main works are located at East Pittsburg, where is manufactured steam engines ranging from five to five hundred horse power, gas engines up to three thousand horse power, turbine steam engines as great as fifteen thousand horse power, mechanical stokers and storage batteries. The capitalization of this company is $10,000,000. The chief works at East Pittsburg, cover thirty-four acres of floor space; the number of men employed is 3,500. An average of one hundred and seventy-five cars of finished product are shipped monthly. Branch offices are kept in all principal cities in the Union.

The Pittsburg Meter Company manufactures of dry and fluid meters for natural and artificial gas and water meters. The captalization is one million dollars. East Pittsburg is the seat of their works.

The Westinghouse Union Switch and Signal Company was organized in 1882. They make railway signals and interlocking switches at Swissvale, eight miles from Pittsburg Union station. 2,500 men are employed in this plant, while the floor space covers five acres. Buildings now in course of erection will cover four acres more. The capital of this branch is $2,500,000.

The Westinghouse Traction Brake Company manufactures braking appliances for electric roads and motor belt driven air compressors for tractional and industrial service. The capital here represented is $10,000,000. The site of these extensive works is Wilmerding, with branch offices in all principal cities of this and foreign countries.

The Nernst Lamp Company, organized 1901, makes the celebrated Nernst lamp, now so popular in both America and Europe. These works are situated at Garrison Place, Pittsburg. The capital is $3,000,000 and has branch houses throughout the country.

The R. D. Nuttall Company, organized in 1891, makes gears, pinions, trolleys, etc. These works are at Garrison Place, Pittsburg. The capitalization of the company is $600,000.

One of the greatest plants of this immense industrial group, is that of the Westinghouse Electric and Manufacturing Company, organized in 1886; the authorized capitalization is $50,000,000, of which one half has been issued. The main works cover a floor space of fifty-one acres; the longest aisle is more than a third of a mile in length and a trip through the entire works represents a walk of more than five miles. The number of men employed is 16,000, whose monthly pay-roll amounts to $750,000. An average of seven hundred car loads of apparatus is shipped per month, while the annual output is almost $40,000,000 in value. The product consists of almost everything electrical, from the most delicate measuring instruments up to the largest motors and generators ever built. A special feature of these works is the manufacture of electric locomotives and kindred equipment. So great is the demand for this

class of goods that they have established factories and offices in Allegheny, Cleveland, Newark, New Jersey; New York and in Bridgeport, Connecticut. In these cities these products are made and the company has offices open for contracts and sales in New York, Atlanta, Baltimore, Boston, Birmingham, Alabama; Buffalo, Butte, Montana; Chicago, Cincinnati, Cleveland, Columbus, Dallas, Denver, Detroit, Joplin, Missouri; Kansas City, Los Angeles, Minneapolis, New Orleans, Philadelphia, Richmond, Virginia; St. Louis, Salt Lake, San Francisco, Seattle, Syracuse, Havana, Cuba; City of Mexico, and in many South American ports.

It is not possible, nor is it within the province of this work, to write of or even mention all of the iron industries of Pittsburg. We have referred briefly to one division of the United States Steel Company's works and its origin, to the Jones and Laughlin Company, it being the largest independent iron interest in Pittsburg, and to the Westinghouse establishment. The latter is a consumer rather than a producer of iron and for that reason we have seen fit to consider it briefly in this connection. They are fairly representative of the iron interests of Pittsburg. Yet they give the reader but a limited conception of the real magnitude of the iron industry in this city. Those who would truly know the greatness of the Iron City in this respect must compare its out-put, not with that of other cities or even with states, but with the iron out-put of nations and only with those whose chief pride in manufacturing is their iron industry. For nearly a century Pittsburg has been called the "Birmingham of America." This name was first used, so far as we can learn, in *Niles Register* on May 28, 1814, and with it came the prophecy that this new Birmingham would probably one day become the greatest manufacturing town in the world. In 1842, Charles Dickens made great sport of Pittsburgers for intimating that their city deserved this name, by saying that to set aside the streets, the shops, the houses, wagons, factories, public buildings, and population, it perhaps may resemble "Birmingham in England." Pittsburg has so advanced in the iron industry that today "Birmingham in England," is too insignificant a factor in the product of iron to be mentioned in connection with it, but the product of all of England, Scotland and Wales united may be intelligently compared with it. In 1905, the iron and steel production of Great Britain was 5,989,460 gross tons, while the Pittsburg district alone produced 6,593,117 gross tons. But in November, 1904, another Englishman, less witty, but more practical than Dickens, and renowned, as being in many respects, the leader of English thought, John Morley, visited Pittsburg and after a thorough examination of its iron industries, said: "The huge triumphs of Pittsburg in material production, iron, steel, coke, glass and all the rest of it, can only be told in colossal figures that are almost as hard to realize in our minds as the figures of astronomical distances or geologic time. I visited the Homestead Steel Works this morning and I have seen many in my own country, but I believe the iron and steel men of my country who were here several days, will concur with me when I say they are the most stupen-

dous to be seen in any country. This is not altogether a source of satisfaction. Can we in Great Britain compete with this energy, system and organization? I hope we can. I think though we shall have to waken up. I think we shall waken up."

At this time it is not possible to give the iron statistics of European countries for a later perior than 1905, and we shall therefore use the figures representing the Pittsburg out-put for that year in this comparison, though the product of 1906 was still greater. The product of iron and steel of the entire world in 1905, was 41,846,933 gross tons and the Pittsburg district alone produced nearly one-sixth of it, viz., 6,593,117. But to compare one city with all the balance of the world is unfair. The product of the United States, outside of the Pittsburg district, was 10,246,898 tons. Had Pittsburg therefore added but a few thousand tons more than fifty per centum to its product, it world have equalled all the rest of the United States. Russia, France and Belgium are all in their way, noted iron producing countries in Europe, but like Great Britain, all united cannot equal Pittsburg, for Russia produced but 2,811,948; France 2,136,806, and Belgium 1,173,020 or 6,121,774 gross tons as against 6,593,117 from Pittsburg. Germany is now the great iron producer of the old world and stands next to the United States in its product. Yet Pittsburg in 1905 by adding 60 per cent to her product would have surpassed Germany, the product of which was 10,252,684 gross tons. It must therefore be admitted that the Iron City in this respect, can be compared only with nations, and Germany is the only nation in the world, save our own, which surpasses Pittsburg.

Pittsburg is great in the product of steel rails. When the United States began their manufacture in earnest, less than a generation ago, Great Britain had almost a monopoly of the steel rail business of the world. The United States has wrested this supremacy from the Britons and driven them to the manufacture of pig iron, in the product of which alone, they surpass Pittsburg. Their out-put of pig iron in 1905 was 9,592,737 as against Pittsburg's 5,410,890 gross tons. Germany also surpassed Pittsburg in 1905, with 10,811,483 gross tons. But so long as Pittsburg excells in the product of iron and steel, she need not lament that nations abroad carry the banner in the product of raw material such as pig iron. Pittsburg is most noted for its product of steel rails, and in that branch of the iron trade it can be compared only with the United States itself. It produced in 1905, 743,612 gross tons of steel rails as against 3,375,929 tons in all of the United States. The reader can scarcely comprehend this immense steel rail product unless he is a practical iron man. It is more than the one-fifth of the product of the United States, yet Pennsylvania is full of steel rail establishments outside of Pittsburg, and they are found in great numbers in New York, Ohio, Indiana, Illinois, and in almost every state in the Union. The weight of steel rails varies per yard from fifty-six to 110 pounds; the introduction of the 50-ton steel cars having forced the railroads to adopt a heavier standard of rails, particularly in Western Pennsylvania,

where coal and iron are extensively handled, and the 90 and 100-pound rail is very common in this section. A practical railroad man has given it to the writer as his opinion that a 70-pound rail is heavier than the average rail throughout the United States. If that be a true estimate Pittsburg alone in 1905 produced steel rails sufficient to build two railroads from New York to San Francisco, 3,000 miles, and double track the one-eighth of each of them.

CHAPTER V.

Banking in the Early Days of Pittsburg.

Pennsylvania has two reasons for being proud of its banking interests. First because of the strength of its institutions as compared with the banks of other states in the Union, and second because it was first in the Union to engage in the banking business. Indeed it is doubtful if there would have been a Union as we know it now, had it not been for Robert Morris and the bank established through his efforts in Philadelphia for the sole purpose of assisting the colonies in their contest with Great Britain. Morris was the financier of the Revolution. On June 17, 1780, he and ninety-one others, brought together mainly by his efforts, signed an agreement pledging their estates, each one in a given sum, "to support the credit of a bank to be established for providing a supply of provisions for the armies of the United States." A year later Morris, as superintendent of finance, submitted a plan of establishing the Bank of North America which was sanctioned by congress and it began business with a capital stock of $400,000, on January 7, 1782. The affairs of the first organization were taken over by the Bank of North America and it continued to render most important assistance to the government in carrying on the war. These were the first banks established in the United States and Robert Morris is justly called the Father of American Banking.

Perhaps there is no business in Pittsburg that has changed and increased as much as the banking business. For the first twenty years of its history, money was almost unknown as a medium of exchange. Nearly all commercial transactions which are now carried on by means of checks and drafts were then but seldom even paid for in cash but were settled by a still older basis of exchange called "barter" which is the exchange of one commodity for another. It is true there were money lenders in Pittsburg even in the latter years of the eighteenth century, and these were bankers on a small scale, but there was then almost no money in circulation, particularly among the pioneers west of the Allegheny mountains and they were forced to exchange one article for another. There was a value in dollars and cents fixed to grain, whiskey, furs, etc., which the settler had for sale, and these were balanced by the goods of the merchant with whom he exchanged. As long as this system could be used there was but little call for bankers. Pittsburg had

been for twenty years or more the commercial center of the West, had made some progress in manufacturing and had a population of 3,000 before even an attempt was made in banking. By an act of the Pennsylvania legislature passed March 30, 1793, the Bank of Pennsylvania was established at Philadelphia but permission was given the directors to establish branches wherever they saw fit, within the state, providing the consent of the town or borough was first obtained. It was chartered for twenty years and in 1810 it was extended for twenty-one years more. The first movement to secure a branch of this bank in Pittsburg was made in March, 1803, when a public meeting was called by a notice in the columns of the *Gazette,* asking "the freeholders and other inhabitants, householders, to attend a meeting of the corporation at the court house on Saturday, the 26th inst., at four o'clock p. m., in order to take into consideration a proposition of the directors of the Bank of Pennsylvania for establishing a branch of their bank within this borough, providing it is approved by the corporation." The directors selected by the Bank of Pennsylvania for the branch bank in Pittsburg were: John Wilkins, Jr., Presley Neville, Oliver Ormsby, James O'Hara, James Berthaud, Ebenezer Denny, Joseph Barker, George Stevenson, John Woods, Thomas Baird, John Johnson and George Robinson. The preliminaries were arranged during the summer of 1803, and in December a meeting of the Pittsburg directors was held. They elected John Wilkins, Jr., as president. A notice was issued on January 4, 1804, that on Monday, January 9, the "Office of Discount and Deposit at Pittsburg" would be ready to begin business. Thomas Wilson, who was sent out from Philadelphia for that purpose, was appointed cashier. The branch bank opened up in a two-story stone building on the east side of Second street between Market and Ferry streets. Its location for that day was a splendid one, for it was in the business center of the borough. The stone structure stood on the plan of lots that had been plotted by Colonel Campbell forty years before, viz., 1764. It was in its day one of the solid stone structures of the town and it stood and was in use forty-one years after that, when unfortunately it was destroyed by the fire of April 10, 1845. But for this calamity its walls might have been solid even to this day. It was also announced that this branch bank or office would be kept open from nine a. m. till three p. m. every day except on Sundays and holidays. That all paper for discount must be presented on Wednesdays and that the day following, Thursdays, would be discount days. All discounts would be made for a period not exceeding sixty days and that such paper must be secured by two names. Notice was also given that drafts on the Bank of Pennsylvania would be issued at a premium of one per cent.

There was at that time for sale a great deal of public land in the near West, the proceeds of which, because of its convenience, were deposited in this branch bank and then paid to the national government. Albert Gallatin was then secretary of the treasury and in a statement made to the national congress showed that the Pittsburg Branch had turned in $225,781.93 for the year closing September 30, 1804; for the year closing September 30, 1805, $486,825.45, and

for the year closing September 30, 1806, $447,669.89, a total in three years of $1,190,277.27. This money was of course drawn from the bank from time to time, and not in the large sum represented by the deposits of the entire year. The report, however, shows the cash balances on the last day of each quarter as follows: March 31, 1804, $116,123.60; June 30, $165,637.93; September 30, $191,781.93; December 31, $180,732.39; March 31, 1805, $329.25; June 30, $155,172.06; September 30, $67,354.70; December 31, 2,674.15; March 31, 1806, $28,729.82; June 30, $98,986.46; September 30, $42,548.48. It will be seen therefore that the branch bank at Pittsburg did an extensive business for that day at least. So much money flowing into the government could not otherwise than mean extensive financial transactions among the early citizens of Pittsburg and of Western Pennsylvania generally. For the first venture in banking it was a decided success and in some way presaged the great financial institutions which were to follow it in Pittsburg less than a century afterwards. It was a great advantage generallly to the little town, but it particularly taught its patrons the value of deposits. When the War of 1812 came the general government was sorely pressed for money and drew from it and from all banks in which it deposited almost as rapidly as it came in. At one time, June 28, 1817, the treasurer of the United States drew on the Pittsburg Branch for $633,127.04. This was the largest draft in its history, but there were several which exceeded two hundred thousand dollars. The government deposits were mostly, but not all, made in the Branch Bank. Some were placed with the Farmers' and Merchants' Bank of Pittsburg. The Branch Bank was kept up until February, 1818, at which time a branch of the Bank of the United States was established in Pittsburg (1817) and shortly after that all deposits belonging to the government were placed with it.

The Bank of the United States had been first established by an act of the United States congress passed February 25, 1791. The act provided that its capital should not be more than ten millions of dollars, which should be divided into 25,000 shares of $400 each. The charter of this bank was to expire in March, 1811. The branch of the United States bank established in Pittsburg was not under this charter. Pittsburg was probably regarded as too small a place to be thus distinguished. When the time drew near for the bank to ask congress to renew its charter, it was bitterly opposed by many throughout the country and particularly by some of Pittsburg's most influential citizens, and a lengthy and well-prepared petition against re-chartering it was sent to congress from Pittsburg. It is printed in American State Papers, Vol. 2, page 479. It was signed by seventy-nine citizens and is a strong paper against the principal. The legislature of Pennsylvania passed a resolution instructing the members of congress to oppose the renewal of the charter. Notwithstanding this, congress re-chartered it on April 10, 1816.

The first banking business in the city which resulted in a permanent organization was begun by home capital in February, 1810. This was at that time called the Bank of Pittsburg, a name the honored institution still bears

though, as the reader will see, it was not continuously borne. Sanctioned by the Act of Assembly of 1808, a number of the wealthiest business men of the city founded it and engaged in banking and insurance business. They were not incorporated, for to secure a charter by act of the legislature was no easy matter in those days, and the custom of incorporating every business organization was not followed so closely then. The avowed object of the company was to assist manufacturers of Pittsburg by advancing them money when they were in need of it. The organization of the company proves that many of the Pittsburg business men had been successful and were wisely using home capital in furthering the interests of the town and of their neighbors who stood in need of financial assistance. By an act passed March 10, 1810, they were prohibited from continuing in the banking business unless thay were regularly incorporated by the legislature. Under the workings of this act they ceased to do business as the Bank of Pittsburg, but continued the banking business and the insurance business under the name of the "Pittsburg Manufacturing Company." They at once asked the legislature to incorporate them as the Bank of Pittsburg. They failed to secure a charter, but because of the high standing of those who were thus associated, they had the confidence of the community. To secure a charter they offered $40,000 of the capital stock of the bank or from forty-five or sixty thousand dollars to certain public improvements then in contemplation in Western Pennsylvania. Failing in this they continued in business as the Pittsburg Manufacturing Company and in reality, transacted a regular banking business without a charter. In 1813 they again applied for a charter and presented a memorial setting forth the needs of Pittsburg, its rapid growth, etc. There was a general bill pending then called the Mammoth Bill which, among other things, provided for the incorporation of the Bank of Pittsburg. This bill was passed, but was vetoed by Governor Simon Snyder. A year later, March 21, 1814, it was again passed and by two-thirds majority in both houses, and became a law. This law provided that all banks named in it as incorporated should, at any time, on sixty days' notice, lend to the state a sum not exceeding the one-tenth of their capital stock paid in at not more than six per cent. per year and for a time not exceeding five years. The law incorporated the Bank of Pittsburg with a capital stock of $600,000 and also the Farmers' and Mechanics' Bank of Pittsburg with a capital stock of $450,000. The newspapers of that day give William Wilkins credit, very largely, for securing the incorporation of the Bank of Pittsburg and for the passage of the laws governing it, and it was afterwards charged that he had "tricked the legislature" into passing the bill. It is quite likely that he brought to bear on them, every possible means to secure its passage. Books were opened by the new Bank of Pittsburg at the office of the Pittsburg Manufacturing Company on May 10, 1814.

The organization was perfected by electing a board of directors on November 23 of the latter year. The readers of these pages are familiar with many of the names of this board. They were William Wilkins, George

Anshutz, Jr., Thomas Cromwell, Nicholas Cunningham, John Darragh, William Hays, William McCandless, James Morrison, John M. Snowden, Craig Ritchie, George Allison, James Brown and J. P. Skelton. William Wilkins was afterwards a judge, a member of congress and of the United States senate, a member of President John Tyler's cabinet and minister to Russia. A sketch of him is found in a history of the bench given in these pages. George Anshutz, Jr., was the pioneer iron workers of Pittsburg and Western Pennsylvania. John Darragh was the father of Cornelius Darragh, who was one of the great men of Pittsburg a generation later, serving in congress, as attorney-general, etc. William Hays was a tanner in early life and a representative in legislature and was the father of Richard T. Hays, afterwards noted in the banking business of Pittsburg, being president of the Iron City Bank. William McCandless was prothonotary of Allegheny county and a relative of Judge Wilson McCandless. John M. Snowden was one of the first editors of Pittsburg. Craig Ritchie was from Washington county, where he was better known than in Pittsburg. Of the others we know little or nothing, but the reader will remember that nearly a century has passed since they were prominent in the business of the town and that so transient is human fame that a name must be well known indeed to outlast even the span of years allotted by the Psalmist as the length of the life of mankind. Those who are unknown to us doubtless, like their associates, were men of high standing in business and of marked integrity. The allowed capital of the Bank of Pittsburg at its founding was $600,000 but it doubtless began business on less than a third of this sum as a paid-in capital, for even as late as 1833 but $250,000 of the capital had been paid up. It was re-chartered by the legislature of 1824 without increasing its capital stock. In 1834 it was again re-chartered for fifteen years and was given permission to increase its capital stock to $1,200,000, but of the new stock issued, five per cent was to be given to the school fund of the state. It was also permitted to establish a branch in Beaver county and was prohibited from issuing notes of a less denomination than five dollars and this provision also prohibited it from receiving such notes from other banks. Under the new charter the bank took up the matter of increasing its stock at once, by advertising a sale of stock on Monday, January 24, 1834, at the house of George Beale in Pittsburg. This stock was to be paid in installments of ten dollars every two months. A branch was also opened in Beaver with a capitalization of $200,000. The bank in Pittsburg was paying good dividends, but the Beaver branch did not pay more than four per cent. The Beaver stockholders objected to taking a less dividend than the Pittsburg bank was paying and petitioned the legislature to enforce such payment. The legislature appointed a committee to investigate the matter and their report was against the Beaver branch. The Bank of Pittsburg accordingly withdrew the Beaver branch entirely in 1839.

In 1834, the capital stock was doubled, the allowed capital after that being $1,200,000. The former capital of $250,000 was doubtless an abundant capi-

tal for the bank for its first twenty years. When the bank was re-organized William Wilkins was elected president and Alexander Johnston, Jr., was made cashier. The next president was John Darragh, who was followed by John McDonald, who in turn gave way to William H. Denny, who served until 1835 when John Graham was made president. Mr. Graham served as president continuously until 1866, when he was succeeded by John Harper, who is remembered as one of the most noted bankers in Pittsburg banking history. He had entered the business in his youth and became chief clerk of the Bank of Pittsburg in 1832. This position he retained eighteen years, when he became assistant cashier. John Snyder was then the cashier and on his resignation in 1857 Harper became cashier. In 1866 the president of the bank, John Graham, having retired, John Harper was elected president, which position he filled until his death, on April 5, 1891, having been engaged in continuous service in the one bank for about sixty years. He had filled all the offices in the bank, and filled them well, from that of clerk to president, and at his death was the oldest bank officer of continuous service in the city of Pittsburg. He was born in Ireland in 1811.

Two leading and somewhat peculiar principles in the general policy of the Bank of Pittsburg, to which it has always closely adhered, were first that it regarded its liabilities payable in specie, in which it but followed out the policy of the Pittsburg Manufacturing Company, which also inaugurated the second principle, namely that its loans should be largely made to assist Pittsburg manufacturers. It is claimed by the officers of the bank that in no instance in its history has it forced the collection of a loan in times of financial distress. It is claimed by many that the bank never suspended specie payments. This is true with but one unimportant exception. In 1837 at a large public meeting of the citizens of Pittsburg the banks were requested to suspend specie payments and this suspension was accordingly made, but it was for but a short time until the Bank of Pittsburg resumed specie payments in special cases in small amounts and in a short time resumed its long-standing rule of full specie payments. Banks suspended generally in 1839, but this bank continued to pay species on all its liabilities and again in 1841, when nearly all of the banks west and south of New York suspended such payments, it was not forced to even temporarily deviate from the rule. The same rule was carried out in the great bank crisis of 1857 and again the bank adhered to the rule in the trouble of 1861. In doing so from December 30, 1861, to December 1, 1866, it paid out in gold $1,374,939. When the national banking system was established it declined to become a national bank. Under the law, as it was then, it could not maintain its circulation as authorized by the laws of the state. It was compelled, therefore, to redeem its notes in specie and retire them. As a state banking institution it has had no notes in circulation since 1866. The Bank of Pittsburg paid its first dividend of 4 per cent in May, 1815, and previous to that as the Pittsburg Manufacturing Company it had paid six dividends. It has paid dividends regularly in May and November ever since.

It has now as a banking institution reached its ninety-seventh year, ninety-four of which it has retained the same name. It has passed through four great financial depressions, each of which were felt severely throughout the Union and there were during that time, five general suspensions of specie payments, but has not, save in a single unimportant instance mentioned above, deviated from its original policy.

The Bank of the United States was established on the recommendation of Alexander Hamilton, the first and ablest secretary of the treasury, whose purpose by this bank was to restore the finances of the new nation, shattered as they were by the expenditures of eight years of warfare. This was properly the first national bank in the United States and if measured by its salutary effects on our finances, it was undoubtedly the greatest banking institution in our national history.

In 1817 there was a petition of many citizens of Pittsburg sent to the president and directors of the Bank of the United States at Philadelphia asking them to establish a branch bank in Pittsburg. It was signed by many citizens and firms. The Bank of Pittsburg had then been doing business practically for eleven years, but the organization asked for was not in opposition to it, for the memorial sent to Philadelphia was signed by John M. Snowden, George Allison, William Hays, John Darragh, Thomas Cromwell, etc., all of whom were directors in the Bank of Pittsburg, as shown by the election of officers referred to above. The list of subscribers is a very valuable one, for it gives the names of the leading business men of Pittsburg at that time, and it is, therefore, given in full. The memorial sets forth that the people of Pittsburg labor under great and increasing difficulties for the want of some general circulating medium by which, without great sacrifice, they could discharge their eastern indebtedness. The paper issued by western banks, they set forth, was not at par in the East and that the high rate of exchange charged operated seriously against western merchants and that this compelled them to curtail their business and in some instances forced them to close their concerns entirely, rather than risk their honest gains in the commercial world by paying the exorbitant premiums for the purchase of eastern paper, in exchange for that which they are compelled to take from their customers. The memorial suggests that the branch bank asked for would relieve this condition of affairs and restore the circulating medium to the same condition it was before the general suspension of specie payments throughout the country. The petition refers particularly to the importance of the western commerce and states that the branches of the United States banks already established in Baltimore, Cincinnati, etc., are too remote from Pittsburg to assist its merchants and too remote from northwestern Ohio, Michigan, etc., all comprising a community of great wealth, which, the memorial states, equals in the importance of its manufactures, any state in the Union. It suggests also that the military department recently established by the United States in Pittsburg will call for the expenditure of vast sums of money by the government, all of which could be more conveniently paid through the

branch bank asked for in the petition. It also refers to the collection of public revenues and monies from the land sales in the northwest territory, which would be greatly facilitated by complying with the request of the petition. It further suggests that the growing population of the district which would be benefited by the prayed for branch bank, and the increasing wealth and commerce of its manufacturing interests entitled them to a favorable consideration at the hands of the United States Bank in Philadelphia. This petition is signed by the following very important list of Pittsburgers: A. Tannehill, H. B. Holmes, Armour & Wallace, Robert Herron, Bosler & Co., J. and N. Darragh, Richard Bowen & Co., L. Stewart, Doran, McCabe & Co., John Horn, Gilliam & Co., Andrew Wite, J. Whiting, Nicholas Cunningham, Hugh Davis, Peebles & McKee, Bonnel & Howard, Abner Barker, Isaac Craig, Robert Simpson, Robert Getty, Daniel Wylie, E. Williams, Nathaniel Holmes, William Earl, W. Closey, Samuel Pettigrew, Hiram Badgely, Peebles, Tweedy & Co., Samuel Mackey, Brady & Butler, William Kipner, John Davis, A. McAlpin, Joseph Thompson, Samuel and John Thompson, John McDonald, Walter Forward, Jacob Welsh & Co., Thomas Read, Christy & Liggett, James Wells, McKee & Co., David Greer, Francis Wilson, William Turney, Samuel Bern, Joseph Goulden, S. Bakley, Joseph Caskey, William Clark, F. Brunot, Jr., Isaac Harris, William Hutchinson, Corey & Wilson, Andrew Otthoff, Robert Wilson, John Hamilton, C. F. Adler, James H. Kaltee, Francis Bailey, Jacob Negley, Francis Herron, William Hill, John D. Davis, A. J. Chittenden, William McKnight, Johnston & McClelland, Duval & Short, D. & J. Chute, F. & G. Algeo, James Walker, J. E. Johnson & Co., Benjamin Bloomfield, Daniel Boyle, Isaac Wickersham, James Brown, R. Graham, Cochran & Scottow, M. B. Lowrie, R. Patterson, George V. Robinson, S. V. R. Forward, James Jolley, William Moore, Jeffrey, Scaife, Hazelton & Jones, Samuel Davis, Arthur Macoubry, James Gormly, A. Gormly, John Birmingham, Brown & Scott, Thomas Enoch, Thomas Johnston, James Sutton, William Montgomery, Thomas McDermot, Charles Martin, William Graham, John L. Reed, George Watson, Edward Patchell, John Jackson, George Reiter, George Mazuire, William Steele, John M. Snowden, Cramer, Speer & Eichbaum, R. H. Wooley, Sutton, Irwin & Co., A. Kneeland, Benjamin Darlington, John Gibson, Joseph Wiley, Jr., Thomas Taylor, McDonald & Elkin, H. Bailey, John Little, John T. Wright, Joseph McCullough, J. Torrens, J. McAdams, James George & Co., George Allison, Lewis Peters, J. W. Hunter, B. Troost, James Laubie, Philip Mowry, Thomas Ingram, Alexander Smith, M. Stewart, Moses Twitchell, George Swartz, Robert Cairns, Joseph Armitage, James McCracken, John Means, John Butler, William Caldwill, James McVicker, John McClintock, P. Gilland, Charles Wilkins, Jr., Robert Magee, R. Hilands, Joseph Davis, James M. Riddle, John Irwin, Henry Sutton, G. Fosdick, William Tait, John McCormick, Carter Curtiss, Foster & Doan, Bolton, Encell & Co., Allen & Grant, McClurg & McKnight, Anderson & Bell, Samuel Smith, Armstrong & Ewing, H. McClelland, C. L. Volz & Co., Anshutz, Rahm & Co., Aaron Hart, James Liggett,

John McGrew, John Wrenshall, Thomas Gormly, Charles Plumbe, George Miltenberger, Charles Latshaw, John Phillips, Solomon Stoner, John Hodge, James Park, Packabury, Pefford & Co., C. Patterson, W. Blair, James Patterson, William Dietsch, William Hays, William B. Irish, A. Kirkpatrick, Mark Stackehouse, George Forrester, Mahlon Rogers, David Logan, James Holmes, James McCully, Stephen Barlow, John Gibson, A. Ernest, Charles Mayes, John L. Johnston, English, Alexander & Co., Thomas Cooper, Robert McElhinney, Jr., Henry Holdship, Fred G. L. Burhing, A. Humbert & Co., Thomas Duncan, John W. Johnston, James Crossan, Robert Cochran, John Jones, Arch. Richmond, James Wilson, Walter Glenn, John Meek, P. C. McCombs, John Linton, Thomas Fairman, William Robinson, John McClelland, James Arthurs, James Miller, Andrew Watson, Bakewell, Page & Bakewell, John Beltzhoover, John Graham, William Semple, Bedwell & Co., William Moore, Henry Westberry, John G. O'Brien, Samuel Young, John Caldwell, Andrew Willock, A. Geary, John Hankart, James Cummings, Peter Beard, William E. Robinson, John Scott, Hugh Hazelton, A. and J. Sherriff, John Byrne, A. Brackenridge, James M. Hahn, Thomas J. Lea, Neal & Miltenberger, Cromwell & Dobbin, William Watson, J. and J. Wassoon, Charles Craig, Arthur F. Gore, George Robinson, Benjamin Kendrick, John Osborne, Jacob Carmack, Daniel Speir, J. L. McMillen, Gormly & Bell, Avery & Stevenson, Robert Alexander, R. L. Dunn, Ephraim Blaine, Scudder Hart, George Scott, William Church, John Payntz, Andrew Johnson.

There was also a reasonably strong opposition to the movement. Many of the early citizens traced the hard times which followed the war of 1812, to the banks, and by an equally absurd reasoning inveighed against the institution generally. They reasoned that the banks with bulging money chests, anxious at all times to make loans, were a constant temptation to the farmer and business man to borrow and to thus over-reach themselves, and that this temptation should be removed by the abolition of the entire system. This petition as signed by the above business men was nevertheless successful and a branch was established shortly after in 1817 with George Poe as cashier. It was kept open until the charter of the United States Bank expired and President Jackson refused to approve of the bill passed by Congress for its recharter. The newly established branch of the United States Bank was opened in the rooms occupied by the Pennsylvania Branch Bank, but later built a marble building on Fourth avenue, which was, when completed, the finest structure of its kind in Pittsburg. This building was used by it until the charter expired. It proved a very successful branch and was of great advantage to the merchants and manufacturers of the city and of Western Pennsylvania and Ohio, for it relieved them almost immediately of the burdens which were complained of and enumerated in the memorial. Later in these pages we shall consider the action of President Jackson in destroying the United States Bank. It is fair, however, to say that the branch bank in Pitts-

burg furnished a better currency than the people had before and that it greatly benefited the merchants and manufacturers in many ways.

The charter of the second Bank of the United States provided for a capital of thirty-five millions of dollars, 350,000 shares of $100 each. The government subscribed for 70,000 shares, and the balance was taken by the people, no one person or corporation being allowed to take more than 3,000 shares. The charter provided for the continuance of this bank until March 3, 1836, and the directors were allowed to establish branch banks wherever they saw fit. The directors of the new branch were Adamson Tannehill, George Stevenson, William Robinson, Jr., George Boggs, James Ross, Robert Patterson, Walter Forward, S. Barlow, Ebenezer Denny, Thomas Baird, Anthony Beelen, William McCandless and William Hill. Tannehill was elected president. The bank, sanctioned as it was by the United States, did a large business. In October, 1818, the individual deposits alone reached $63,814.66, but this was a small sum in comparison with the amount of the public money which the bank handled. It was also empowered to lend to all borrowers, on approved security, not only the deposits of the government but had additional power to issue notes. In December, 1818, less than a year after it was opened, it had issued $420,000 in notes. These like the national bank notes of our day, were loaned to the borrowers, and in addition, it loaned large sums deposited with it by the government and by the people. Its statement of February 3, 1819, showed that it had in loans the following sums:

To manufacturers and mechanics	$479,111.12
To merchants	183,406.62
To farmers	30,300.00
To corporations, churches, etc.	44,945.00
Total	$737,762.84

A large amount of its deposits were, of course, transferred to it from the branch bank of the Bank of Pennsylvania as indicated above, but these were rapidly increased for the name of the United States was very powerful. The branch grew in strength and in a few years held real estate in the city valued at $35,000, but it can scarcely be said that it grew in popularity. From time to time new men were appointed as directors and they were always prominent men, and men of character, who added to the standing of the institution. The scheme was a Federalist measure but it was patronized by others and even to some extent, by its opponents. It was generally at war with the state banks of the city. On February 13, 1819, a public meeting in opposition to the Branch Bank of Pittsburg was held and was largely attended. At a second meeting on February 16, resolutions were passed setting forth that the bank of the United States had been conducted in a manner disgraceful to its directors and injurious to the community; they also set forth that the Branch Bank of Pittsburg had "produced effects extremely detrimental to the interests of the Western District of Pennsylvania." They therefore asked congress to repeal

the charter of the Bank of the United States, and asked the legislature to pass a law taxing it and its branches, their object doubtless being to drive them from the state by a heavy tax. Congress appointed a committee to inquire into the matter and their report exonerated the bank and its branches from dealing unfairly with the state banks. The people were then undoubtedly more loyal to state institutions in contradistinction to national matters than they are now. The editorial columns of that day are generally strongly against the Branch Bank in Pittsburg, and perhaps err in ascribing to the bank more than its share of the ills of the day. Hard times were upon the people generally but they followed the War of 1812 for certain reasons and would probably have been equally severe had the bank never been thought of. Much of President Jackson's popularity in Western Pennsylvania was due to his opposition to the Bank of the United States. A great political question of the early thirties was the renewal of its charter, and this was, particularly, a much discussed matter in Pittsburg. Flush times had come to the country generally in the early twenties, but with the canal and other improvements Pittsburg was in the midst of great prosperity. Jackson's policy was to remove all public moneys from the Bank of the United States and its branches. In this manner he weakened the project of re-chartering it. But in withdrawing these deposits from the Branch Bank of Pittsburg, he at least temporarily embarrassed the financial and industrial interests of the city. The business men had learned to depend on the bank for assistance. The products of the factories were then sold largely in the western states and almost invariably on from four to twelve months credit, or even more than that. Bills were drawn by the manufacturer or shipper and the Branch Bank readily discounted them, this enabling him to invest his money at once in new products. The large amount of deposits in the Branch Bank enabled it to discount bills of this kind that were far beyond the reach of smaller institutions. The long credit system was much more necessary then than now. Products are now shipped from Pittsburg to a point five hundred miles distant in a night, and it is possible for the shipper to receive his pay for them the day following. Cattle were then driven to the market at an average of ten or twelve miles in twenty-four hours, whereas, they may now be shipped nearly a hundred times that rapidly. The return of the money for the product was necessarily almost equally slow. Increased facilities of transportation have largely done away with the long credits which were almost necessary in the early days of Pittsburg's commerce. When President Jackson set about, therefore, to defeat the re-charter of the United State Bank by withdrawing the deposits from it and by every other lawful method within his reach, he temporarily unsettled the finances of all branch bank cities, Pittsburg among others. Statesmen, bankers and all others saw the contest coming a long way off. Daniel Webster introduced a bill in March, 1834, to extend the charter for six years.

President Jackson was not able to prevent the passage of the bill re-chartering the bank but he promptly vetoed it when it passed and congress

was not able to pass it over his veto. The affair created great excitement throughout the country and in no city more than in Pittsburg, for the interests of the city were closely woven with the Branch Bank. The directors of the Bank of the United States were at once suspicious that Jackson would resort to drastic measures to prevent even an attempt to re-charter it in the future and they began, therefore, to prepare for the worst by drawing in their loans, and almost abandoned discounts. They were thus somewhat prepared for it when in October, 1833, the government deposits were actually withdrawn. William Wilkins, one of the brightest men Pittsburg has produced in all her history, was a member of the United States senate during the war against the bank and sustained the president in his opposition to it. In an address which he delivered in the senate he had said that there was no pressure, money stringency or hard times at the present time in Pittsburg, his home. This statement was published widely and it was thought demanded a refutation. Accordingly, on January 20, 1834, a number of Pittsburg business men met at the house of George Beale, a banker and general man of affairs, to consider the matter. An organization was formed and committees were appointed to prepare resolutions and to secure signatures to them and present them to congress and to the Pennsylvania legislature. Four citizens in each ward were appointed to circulate copies of the resolutions. These resolutions set forth that a great pressure existed at that time in the money market, the tendency of which was to cripple and destroy the mercantile and manufacturing business unless it was speedily remedied; that the removal of the deposits was unwarranted and a violation of the contract made with the Bank of the United States when it was chartered; that the effects of the removal when necessity did not require it, had created a severe financial depression which operated against all classes and threatened to paralyze industries; that the measure was brought with great injury to the currency of the country and that they feared a renewal of the dismal scenes of 1817 to 1820, "when all credit was destroyed, business stopped, our men of industry and enterprise ruined and half the real estate of the community sold at sheriff's sale." They resolved that they knew of no other cause for the pressure except the removal of the deposits, though they were brought in four months from great prosperity to great distress. They asked that members of congress vote that all future public deposits be made in the Bank of the United States, and closed by stating that though they had felt the pressure produced by the removal of the deposits for some time, they had hesitated to memoralize congress until they had learned that their senator had stated in his place in the senate that he had not been informed of any financial difficulty in Pittsburg.

The resolutions prayed for a restoration of the deposits in the Bank of the United States. They were signed by about two thousand citizens of Pittsburg and Allegheny and were sent to Harmar Denny, then in the lower house of congress, and to Senator Wilkins, to be presented to congress. Mr. Wilkins, in presenting them, spoke at length in explanation of his former statement.

Daniel Webster replied to him by saying that a memorial signed by several thousand citizens as this one was, could not be mistaken in a statement of a fact so obviously true, not only to congressmen who were aware of the distress prevalent throughout the country generally but to the citizens of Pittsburg particularly, who were suffering from the stringency and hard times. With his usual impressive eloquence Mr. Webster said: "The present is a moment of spasm and agony. The whole social and political system is violently convulsed. This, if no relief comes, must be succeeded by a lethargy which will strike dead the commerce, manufactures and labors of the community. This, I think, sir, is the real prospect before us."

It will be understood that a subtreasury had been established by the administration and that all national deposits were drawn to its coffers long before the charter had expired.

But it must not be thought that the people in Pittsburg were all against the measures adopted by the administration. A memorial setting forth the other side of the situation was circulated in Pittsburg and was signed by 336 citizens. In this the signers "earnestly and strenuously" denied every and all positions assumed by the former petitioners in their memorial. They said: "We fearlessly assert that there is no pressure here, and that no sound man is embarrassed in his business." This was also sent to Harmar Denny and was presented by him to congress. The question became one of the bitterest ever known in the city. There is no doubt now but that the banks called in their loans and practically ceased to discount paper; no banker of ordinary discretion would do otherwise. This concerted action fell of course most heavily on habitual borrowers and men of less discretion in business, but it was a time of great stringency which was felt and severely felt by all citizens of Pittsburg.

The contest became the all absorbing one in Pittsburg. On February 6, over six hundred citizens met in the court house to consider the financial situation. Thomas Fairman, on motion of Neville B. Craig, was called to the chair, and on motion of George W. Jackson, Samuel P. Darlington and Samuel B. McKenzie were elected secretaries, Isaac Lightner and John Arthurs were elected vice-presidents. W. W. Fetterman made the leading address and offered a series of resolutions which reiterated the contract made by congress with the Bank of the United States when its charter was granted, the contract being that the public moneys should remain in the bank and that for this deposit and its charter the bank had paid the government a million and a half of dollars and that "the late removal of deposits, whether done by the president of the United states or by the secretary, was an arbitrary, unjust and illegal act." They resolved that the removal of the moneys "to various local banks of unknown solvency was an unwise and hazardous measure," and that the pecuniary pressure was not a matter of opinion but a "painful reality, which was increasing and which resulted from the removal of the deposits, and could only be relieved by placing them again in the bank." Then Judge Charles Shaler arose to represent the other side. All knew him as a man of integrity

and ability who had the good of the city and country at heart. He very eloquently presented a series of resolutions which set forth that, whereas, the charter of the bank was about to expire, some means should be adopted to secure the public against the sudden withdrawal of its currency; that the president, obeying the will of the people, as manifest by his re-election, would not sanction the renewal of the charter, and the likelihood of its renewal by a constitutional majority of congress was remote, therefore the removal of the deposits was a measure of public policy essential to the general and individual prosperity, a judicious exercise of powers granted by the constitution, "entirely consistent with the national faith, and in accordance with the political firmness and moral integrity which have characterized the present chief magistrate, whether in the field or in the cabinet." These resolutions were voted down and the others as offered by Mr. Fetterman were, "carried by an overwhelming majority." The anti-Jackson men were undoubtedly in the majority. On February 11, the Jackson men held a meeting in Concert Hall the purpose of which was to counteract the meeting of the 6th. All who were "opposed to the domination of the Bank of the United States and friendly to the measures of the administration in relation to that institution" were welcomed in the call for this meeting. Thomas Hazleton was president and he, with Judge Shaler and John M. Snowden, were the leading speakers. They spoke with great eloquence and the meeting adopted a strong series of resolutions pledging loyalty to the administration and hostile to the Bank of the United States. On February 15 another meeting of the anti-Jackson men was held, this one in Allegheny. They adopted resolutions concerning the great distress occasioned by the removal of the deposits, and asking that they be restored, and condemning the act of the president in removing them as illegal and unjustifiable. The leading men in this meeting were: John Irwin, president; James Riddle and James Brown, vice-presidents; and D. C. Stockton and John E. Park, secretaries. The resolutions were signed by 342 citizens and were forwarded to Wilkins and Denny in congress.

The reader will understand that application for a new charter came before the old charter had expired, this being done so that the last years of the bank's existence might not be clouded by uncertainty. Pittsburg and Allegheny had voted strongly for Jackson in both of his campaigns. In 1828, his vote over Adams was more than two to one and in 1832 he had carried the county, the city and Allegheny all by large majorities. This it was thought, would give them some standing with him. It was accordingly determined to send a delegation to call on him and present the claims of the Branch Bank to him. The committee was also to call on Governor Wolf as they journeyed east. The committee appointed was: Isaac Lightner, Alba Fisk, William Leckey, John Sampson, Thomas Fairman, Hugh Davis, Samuel Fahnestock, Thomas Williams and J. H. Shoenberger. When they reached Washington they were received most graciously by Senator Wilkins and Mr. Denny who accompanied them to the White House and presented them to the president. On

their return to Pittsburg a large number of citizens quickly assembled in the court house to hear the result of their mission to Washington. The reception tendered them by "Old Hickory," they reported, was a very lengthy, a very unsatisfactory and a very stormy one. The president had never learned the art of duplicity and very plainly told them of his unbounded hostility to the Bank of the United States. They gathered from his remarks and reported to their Pittsburg friends that he had caused the deposits to be removed from the Bank and its Branch Banks and had deposited it in the subtreasury and state banks to protect the latter because they were threatened with bankruptcy by the rapid curtailment of discounts and circulation on the part of the former. In the interview with the president Mr. Denny took the side of the delegation and the bank as against the president, while Mr. Wilkins sustained the president as he had done throughout the contest. The president said to them, "How do I know the true state of public opinion with you? You tell me of great distress and I hear of large memorials on one side, and on the other side, have received an account of a very large meeting approving the removal of the deposits. How am I to judge?" The chairman told him that of the three hundred and thirty-six names signed to the petition endorsing his action, over two hundred were not on the tax lists nor known in Pittsburg and that these were either strangers, minors or fictitious signatures. The president said he would never return the deposits to the bank with thirty-five million of capital at the disposal of one man, for corrupt purposes. He spoke of the money of the government being used to corrupt the public press, and said that to protect the morals of the people it was his duty to take the funds of the government from such a corrupt institution. He said he could not bow down to worship the golden calf. "The Spanish Inquisition could not compel me to worship the monster." The bank he said "wanted to bribe me; wanted to bribe Andrew Jackson. They agreed to pay off the national debt if I would get them a charter, a bonus that would pay off the national debt; but Andrew Jackson was incorruptible; I would not bow down to the golden calf. The experiment shall be tried with the state banks. I will protect the state banks. They would have been destroyed by the vile monster before this time if I had not sustained them. Go home gentlemen and tell your Branch to act harmoniously with the state banks and relieve the people. I will not molest the Bank of the United States or its branches but I will support the state banks."

The friends of the bank were very much disgusted with the action of the president, but the opposite side gloried over the result of the visit of the Pittsburg committee. The newspapers throughout the country took it up and sustained or condemned the president, according to which side they advocated. The *Boston Independent Chronicle* published the following dialogue, which, to the friends of the president, was very amusing in its day. Nicholas Biddle, of Philadelphia, it will be remembered, was president of the Bank of the United States.

COMMITTEE.

"May it please the president, we have come,
To tell you the trouble there is at home.
Our City of Pittsburg is silent and sad,
No longer 'tis filled with the happy and glad;
The hum of business and bustle is o'er,
And we pray you the bank deposits restore."

PRESIDENT.

"And why do you come with your grumbling to me?
No peace do I have in this land you call free;
You should go to Nick Biddle—he sits in his chair,
Undisturbed by complaints and unruffled by care;
He views his ten millions, he pockets his pay,
And cares not a groat what the government say.
The people may cry or the people may laugh,
I will not bow down to the great golden calf."

The friends of the bank did not stop with the return of the committee sent to Washington. They continued to hold meetings, to make addresses and pass resolutions and memorials. One of the latter sent to the Pennsylvania legislature was signed by 1,792 names. They were not all Whigs for they had made many accessions to their ranks, and numbered among them many who had formerly been staunch supporters of the president. Their constant and perhaps exaggerated assertions concerning the financial depression in Pittsburg was impolitic to say the least, and was in itself almost enough to shake the faith of the people and ruin the credit of the city. The Jackson people took a wiser course. They denied that the pressure was more than a temporary one which would soon pass by and denied that it was brought on by the removal of the deposits from the Branch Bank. Their words came true for the city recovered from the depression of 1834. Money became more plentiful in 1835 and times have but seldom been better or money more easily secured than in Pittsburg in 1836. The hard times which came in 1837, can not therefore be ascribed to the president's policy and particularly not so in Pittsburg.

CHAPTER VI.

Banking Business Continued.

The Farmers' and Mechanics' Bank was incorporated in the "Mammoth" act passed by the legislature on March 27, 1814, which it will be remembered, also incorporated the Bank of Pittsburg. It, like the Bank of Pittsburg, had been doing business prior to that time. A copy of one of its notes designated as "A. No. 41," is yet in existence. This note was issued to S. Hill or bearer and was signed by John Scull, president, and M. Neville, cashier. The institution issued very neat notes for that day of primitive engraving and printing. When in March, 1814, it was duly authorized by law, it began to take subscriptions to stock on May 10, following. Books for that purpose were opened at the house of William Morrow. The commissioners named in the act to secure the stock and open the bank were: Jacob Negley, John Neal, George Evans, John Ferris, Thomas Hazleton, George Stewart, George Robinson, Matthew B. Lowrie, William Campbell and Robert Layman. This bank is remembered now mostly because of the great loss it sustained through the Pluymart robbery.

The modern bank is so well provided with safeguards against burglarly that we scarcely realize that is is but a few years, comparatively, since time-locks and modern safes were invented. Prior to this a peculiarly shaped key, which might easily be duplicated, was the only barrier between the thief and the cash drawer. This most noted bank robbery of Pittsburg took place on April 6, 1818. In some way Joseph L. Pluymart and Herman Emmons procured or made keys that would unlock the bank door and inner vaults of the Farmers' and Mechanics' Bank. The amount taken was never known to the public. It was, however, a very large sum in gold and silver and in bank notes. The following morning, when the officers came to open the bank, they first learned of the robbery. Every method possible, or known to the police machinery then, was adopted to apprehend the robbers. They sent men in every direction and particularly down the river in canoes, hoping to run them down. Pluymart and Emmons were known to have been in the city for some time, but were not particularly suspicioned. But they were gone on the morning of April 7, and it was soon learned that they had gone down the river in a boat early on the

morning after the robbery. The first canoe that went down the river searching for the robbers, was in charge of William Leckey, an officer of the bank. Leckey and his company overtook Pluymart and Emmons near Wheeling. They searched them in a general way, but, having left Pittsburg before any suspicion was attached to these men, and finding nothing about them that indicated their guilt, they released them and went hurriedly down the Ohio. It was afterward learned that the robbers had thrown $1200 in gold and silver into the river just before they were overtaken. A second boat sent out after Pluymart and Emmons were suspicioned, overtook and captured them near Cincinnati. They were lodged in jail there but broke out a few days afterward. Emmons alone was recaptured and brought back to Pittsburg. After a short time in jail he confessed his crime and accompanied the bank officers and others down the river to point out the place where the money was concealed, doing this perhaps under a promise of leniency or release. But the escaped robber had, in the meantime, made his way back to the place where they had concealed the money and had taken most of it away. Emmons was not prosecuted and Pluymart, who was skilled in crime, and in evading justice, escaped for many years, but was at length captured at Ogdensburg, New York. Those who arrested him found $5,000 concealed in his clothing and this, less expenses, was sent to the bank in Pittsburg. Pluymart escaped again, but was retaken, tried, and convicted of this robbery ten years afterwards. He was sentenced to three years imprisonment, and to pay a fine of $1,000, but again broke jail. While thus a fugitive he was pardoned by Governor Shulze and this unlooked-for action on the part of the governor became an important factor in the campaign of 1828, which is considered elsewhere.

FARMERS BANK BUILDING

John Scull was president of the bank, and Morgan Neville was its cashier. The latter was a grandson of General Daniel Morgan, who had been granted a heavy gold medal weighing 29 guineas, for heroic services at the battle of Cowpens in the Revolution. This had descended to the grandson and for safety was kept in the bank. It was taken and never recovered.

The bank was very badly crippled by the robbery. Shortly afterwards they published a notice in the *Gazette*, speaking of the temporary embarrassment which would force them to curtail discounts, and asked for all the indulgence that the circumstances would admit of. No one ever knew how much gold was taken, but it was likely less than seventy-five thousand dollars in bills and specie, and the real loss may have been much less than that. The year following, the directors announced that owing to the loss occasioned by the robbery, they would be compelled still further to curtail their issues and retire, gradually, all notes in circulation. They explained that their credit abroad was destroyed, either from a presumption of bankruptcy, because of the robbery, or because of a suspicion of dishonesty on the part of the management. They published that, at the time of the robbery, the amount loaned was $154,520, and that they had bank notes in circulation amounting to $48,963. The public confidence in the ability of the bank, to redeem its currency, was destroyed and as time passed, its affairs only grew worse. Finally the officers of the bank, on July 20, 1819, passed a resolution stating that because of the embarrassment, brought on by the robbery, the affairs of the Farmers' and Mechanics' Bank would be wound up as soon as the nature of the case would admit. While settling up its business it continued to transact business to a limited extent. In 1821 it forfeited its charter by a failure to pay the tax due the state. On April 12, 1825, an act of the legislature was passed which provided that all privileges exercised and enjoyed by the Farmers' and Mechanics' Bank of Pittsburg, under its charter, should remain in full force for the liquidation and settlement of its transactions and accounts until the same were fully liquidated and settled, "and no longer, nor for any other purpose."

The City Bank of Pittsburg was established in 1817 with Rev. Robert Patterson as president and Anthony Earnest as cashier. It was not an incorporation, but issued notes and discounted paper. Its place of business was on Wood street. This bank passed through the hard times, keeping its notes at par, but for some reason, closed its business voluntarily about 1824. Its president was afterwards engaged in keeping a book store, and, it is said steadily redeemed such notes, of the bank, as were presented to him.

The Merchants' and Manufacturers' Bank, of Pittsburg, was established in 1833 by an act of assembly, which appointed the following commissioners to receive its stock subscriptions and open it: Jacob Forsyth, Michael Tiernan, Samuel Smith, Thomas S. Clarke, Samuel Church, James Adams, Jr., William Stewart, Robert S. Cassat, Josiah King, Edward D. Gazzam, Andrew Watson, William M. Carlisle, George Miltenberger, William Holmes, George Ogden, Cornelius Darragh, George A. Cook, William Marks, James B. Irwin, William Robinson, Jr., Samuel Walker, Samuel Fahnestock, Richard Grey, John Simpson, Joseph Oliver, Thomas Scott, James Kittey, James S. Craft, Samuel Pettigrew, William B. Foster, David Lynch, Charles H. Israel, Humphrey Fullerton, Jr., William Eichbaum and Robert C. McFarland. The legislature limited the capital stock to $600,000, 12,000 shares of fifty dollars each to be sold at

public auction in the city, but prevented any one from purchasing more than 30 shares, upon which he was compelled to pay one tenth upon the purchase in addition to the premium it might bring. The first directors elected selected Michael Tiernan as president and James Correy as cashier, with Thomas S. Clark and Samuel Smith as assistants. James Correy was cashier of the Branch Bank of the United States and the board of directors on their first meeting resolved to secure his services if possible. They also purchased a lot on Fourth street for $7,500 and put up a bank building which cost $6,400. Thomas Scott was the architect. The bank issued notes to the amount of $96,000 the first year.

While President Jackson was making his severe battle against the old United States Bank he had his secretary of the treasury remove all national deposits from it and divide them out among the banks of the different states. The Merchants' and Manufacturers' Bank profited greatly by the change, for it received its share of the nation's money. The result of the removal of the deposits was to scatter the nation's money all over the United States and while it undoubtedly stimulated business for a short time by placing a large sum of money within easy reach of the borrower, the expansion resulted deleteriously to the interests of the country by inducing men in all sections to overreach themselves in business and this over-confidence assisted in bringing about the panic of 1837.

The Pittsburg Savings Institution was chartered by the Pennsylvania legislature in 1834. It rarely ever happened that two banks were granted the same privileges for such matters were entirely discretionary with the legislature and were subject to its arbitrary caprice. This bank was permitted to have a capital of not less than $25,000 nor more than $200,000 which should be divided into shares of $25 each. They were not permitted to hold more than $5,000 worth of real estate, except as security for loans, and a further provision arranged for the management of the affairs of the bank by seven trustees who should be elected annually, and who should elect the necessary officers of the institution. They began business on St. Clair street near the river. The trustees elected James Fulton president, James Anderson, secretary and Reuben Miller, Jr., treasurer. Harmar Denny, James Ross, Jr., Alexander Brackenridge and others connected with other banks, were leaders in the project of founding it. After being in business with considerable success for some years a law was passed changing its name to the Pittsburg Savings Fund Company. In 1841 another law was passed changing its name to "The Farmers' Deposit Bank, of Pittsburg" and by the same act it was allowed to increase its stock to $500,000.

When the reign of the Bank of the United States and the Branch Bank in Pittsburg was ended, its supporters throughout the state asked the legislature of Pennsylvania to charter a bank in its stead. This was accordingly done in 1836. They chartered an institution which they named "The Bank of the United States," though it had no connection with the original and real

Bank of the United States except in name. They chartered the old stock holders but excepted the United States and its treasurer who were stockholders in the old bank. They also included "such other persons as may become stockholders." This charter allowed a capital of not more than thirty-five million of dollars, and it was to continue for thirty years or till March 3, 1866. Its charter authorized but two branches and one was opened at once in Pittsburg. The name was preserved, it is said, because of bank note plates on hand, the impressions of which were familiar to the patrons. This will explain why there existed, in Pittsburg, a "Bank of the United States" after President Jackson and his supporters, had in their ever memorable contest, succeeded in defeating the re-charter of the old institution. The new bank was hailed with joy. Those who favored the old bank became patrons of the new by necessity, while those who were opposed to it favored the new institution as the most effectual method of preventing a movement to re-charter the old Bank of the United States on the part of the national congress. The Pennsylvania Bank of the United States is accredited with having done a flourishing business in Pittsburg from the first. The first directors of the state institution were: Michael Allen, Jacob Forsyth, W. W. Irwin, Jesse Lippencott, William Bell, Patrick Mulvany, William Wade, Charles Avery, Jno. M. Snowden, Abishai Way, Thomas Bakewell and Moses Atwood. They were elected July 25, 1836, and Allen was its first president. On July 6, the bank had been opened for business under the new state charter. President Jackson had succeeded only after one of the bitterest fights in our history. Some of his friends were so bitter that they could not endure even the name as adopted by Pennsylvania institution. They transferred their accounts to the Bank of Pittsburg, which had then been successfully engaged in business for a quarter of a century and to the Merchants' and Manufacturers' Bank which had been organized under a Pennsylvania charter in 1833. The old Branch Bank of the United States wound up its business as rapidly as possible. Its cashier in its last years was James Correy. Feeling that President Jackson would defeat the charter, he resigned and became cashier of the Merchants' and Manufacturers' Bank, leaving John Thaw the chief bookkeeper of the old Branch to wind up its affairs when the scheme for re-chartering it failed. Thaw at once became cashier and wound up the business as directed by the Jackson administration. Mr. Correy, on July 25, 1836, became cashier of the branch bank under the state charter. President Jackson under warrant of an act of congress, drew all the money from the old Bank of the United States and its branches into the treasury of the United States and rightfully applied it to the payment of the national debt. Though apparently starting out with flying colors the Pennsylvania Bank of the United States was not by any means a success, either in Pittsburg or elsewhere. Among other provisions it was required by its charter to lend the state, should it require it, a sum not to exceed six millions of dollars at six per centum interest. In closing up the business of the old Bank of the United States, its officers were first compelled to suspend specie payments.

This produced a run on the bank and forced it to close its doors, and the Branch in Pittsburg did likewise. A similar run on the Pennsylvania Bank was precipitated and it with its Branch in Pittsburg was forced to suspend. The notes and stock sank gradually in value and in a short time were not worth forty cents on the dollar. This downward movement continued until the Pennsylvania Bank of the United States made an assignment on September 4, 1841, and the branch in Pittsburg was forced into the same measure. Its notes by this time were in the hands of speculators who purchased them at various prices, but at a small per centum on their face value. It required several years to close up the accounts of the Pennsylvania Bank of the United States and its Branch at Pittsburg. In 1853 the legislature of the state passed a final act, February 23, authorizing the state treasurer, John M. Bickel, to accept one hundred and fifty thousand dollars in full satisfaction of all claims on the part of the state on the Bank of the United States as chartered by the state seventeen years before.

The Exchange Bank of Pittsburg was organized and procured its charter in 1836. Its first president was William Robinson, Jr., who served sixteen years in that capacity and was succeeded by Thomas M. Howe. The act incorporating it was passed March 2, and it named some forty men of Pittsburg and vicinity as commissioners to secure the stock subscription and open the bank. Among these were: William Robinson, Jr., John M. Snowden, W. W. Irwin, Sylvanus Lathrop, W. W. Fetterman, Robert Knox, John Grier, David Leech, John F. Wrenshall, Christopher L. Magee and others, all of whom were well known in business circles. The charter limited the stock to one million of dollars, and provided that the shares should be fifty dollars each. The directors elected were B. A. Fahnestock, S. P. Darlington, John Freeman, James E. Ledlie, Sylvanus Lathrop, Tobias Myers, James W. Brown, George Wallace, Harvey Childs, Samuel Baird, John Grier and W. G. Alexander. They met May 18, and elected their president and also elected John Forster, Jr., as first cashier. The stock holders paid five dollars per share on their stock in August, and October and in November paid $10 per share. The bank also established a branch at Hollidaysburg.

It was generally believed at this time that Pittsburg did not have a sufficient banking capital, particularly when its great industry and its many factories were considered. It had at this time, as was stated in the newspapers, less than half the banking capital of Louisville, less than Cincinnati, and that all of Pennsylvania west of Chambersburg had less banking capital than the Girard Bank in Philadelphia. This belief was greatly strengthened by the stringency in the money market in the early part of 1837. The Board of Trade looked up the matter by appointing Thomas M. Howe, S. P. Darlington and Lewis Patterson to investigate the difficulty and make a report of their findings. They reported that the capital of the banks was too small for business interests of the city and that the manufacturers and others who had products for sale, relied too much on the credit system. They, on investigation, reported that the business

of the city amounted to forty-five millions per year while the banking capital was only about one tenth of that sum. By that time the Branch of the Pennsylvania Bank of the United States had proved too small, as they thought, and the committee burdened it with a good share of the depression. They recommended that the capital of the Branch of the Pennsylvania Bank of the United States be increased to three millions. The Board of Trade took kindly to this suggestion and made such an application, stating the great business interests of the city and the corresponding demand for more capital. The request was refused by a letter from the president of the bank expressing the pleasure with which he and the directors had learned of the increased business in Pittsburg and that they would be happy to grant the request if it were in their power to do so. The business men then called a public meeting, the object of which was to petition the legislature for another bank. This was held at the house of George Beale, and John Anderson was made president with William Porter and William Ebbs as vice-presidents and George Miltenberger and William McCandless as secretaries. The committee appointed to prepare the memorial was John D. Baird, J. W. Brown, John McGill, B. P. Hartshorn and James S. Craft. The memorial asked for a bank called the Mechanics' Bank with a capital of three millions of dollars, and stated the needs of the city, the extent of its business and the inadequacy of the present capital. This request was also refused. Many more petitions of the same kind were sent to Harrisburg all insisting on the three million capital bank, for they evidently had the idea that their trouble was due mainly to the want of banking capital. At this time many bank notes of other states were used in Pittsburg, they generally being of smaller denominations, for it will be recalled that the Pennsylvania banks could not issue notes for less than five dollars. The business men also issued paper for small sums in making change. These were often times neatly printed or engraved promises to pay.

The panic of 1837 is perhaps, all things being considered, the most memorable one in our history. The money stringency of which Pittsburgers complained in the early part of the year, proved to be the forerunner of the gloomy years which were to follow. The trouble began in Pittsburg, on May 13, when it was learned that all of the banks in New York, Brooklyn, Philadelphia and Baltimore had suspended specie payment. It may be necessary to explain to the modern reader that a suspension of specie payment meant their inability or unwillingness to redeem their bank notes in gold. When the business men of Pittsburg thought over the action of the eastern banks, they were forced to the conclusion that a general money stringency at least was imminent. Early on the morning of May 15, in pursuance to a call which had been sent out, many citizens collected at the court house to deliberate over the matter and devise some method of meeting it if the same calamity should overtake Pittsburg. John Lassey was made president of the meeting, William Hays and John Anderson were vice-presidents while D. M. Hogan and J. W. Burbridge were made secretaries. The usual resolutions were on hand, this time of-

fered by the renowned Charles Shaler and seconded by David Lynch, a noted capitalist in the canal trade. These resolutions, in brief, urged the banks of Pittsburg to suspend species payments as the eastern banks had done. They expressed the greatest confidence in the stability of the banks and the integrity of their officers and pledged themselves to receive the notes of the several Pittsburg banks in all business transactions as though they were gold and silver. A committee of ten was appointed to apprise the banks of the willingness of the people to sustain them in any measure they should adopt as necessary to sustain their credit and the credit of the city, during the present calamity. The committee was also instructed to circulate a petition for signatures, asking the governor to call the legislature together, that they might adopt such measures as the exigencies demanded. They recommended evening meetings to deliberate, advised the banks and the city councils to consider the propriety of issuing bills of less denomination than five dollars, as a circulating medium during the suspension of specie payments. The committee of ten was composed of: Charles Shaler, William McKnight, Lewis Peterson, R. N. Havens, William Ebbs, John Hays, W. A. Simpson, James Cuddy, James May and the president of the meeting, John Lassey.

The bank officers held a meeting the same morning and resolved that because of the eastern suspension, and having in view their own protection and that of the community, in order to prevent an entire abstraction of specie from Pittsburg, and being advised to do so by the many citizens at the public meeting, they would suspend specie payments at once, but pledged themselves to guard and restrict their actions with the view of the earliest possible resumption.

It is probable that the citizens meeting was inspired by the banks or those deeply interested in them. The news from the East reaching Pittsburg on Saturday gave them a day to deliberate and the public meeting was held before the banks opened on Monday morning. The panic caught the banks unprepared, and they were probably not able to stand a "run" which would undoubtedly have taken place Monday had it not been for this meeting and its resolutions. It was much better for them to suspend by request of the people than to be forced to do so, better both for themselves and for the public credit of the city. The scheme, whether it originated with the banks or with the citizens, was generally considered a wise one. Apparently the entire nation was at once plunged into overwhelming disaster. To the casual observer, a scarcity of currency was the main difficulty. Wagoning to and from the East ceased; canal lines, unable to secure sufficient money as freightage, to pay the tolls, resolved to suspend business for a time. The postmaster of Pittsburg was ordered, on May 16, 1837, to take nothing but specie for letters and furthermore to keep it in his possession, and not deposit it in a bank, as was the custom. This action was scarcely a wise one on the part of the government and was soundly denounced by the press of that day and by the people. The city script, promises to pay in the future with interest, remained at par or nearly so.

and was taken generally by the merchants and business men. It was in small denominations ranging from twenty-five cents to two dollars.

The citizens were not all of one mind on the question of suspension. Many thought that the banks should redeem all five dollar notes, but pay to no one more than ten dollars at one time nor more than once each day. Others thought they should be compelled to redeem their notes when presented or close their doors. The banks, it will be remembered, at all times claimed that their suspension was a matter of caution not a necessity and averred that they were in a substantial condition. It is quite likely that the Bank of Pittsburg would not have been compelled to suspend at all, but that the others would soon have been forced to do so. In August, at a meeting gotten up in opposition to the banks, a committee of fifty was appointed to try to induce the banks to resume specie payments, but they failed entirely. It is probable that to resume before the East had done so, would have injured the credit of Pittsburg in the end, for the specie would rapidly have found its way East. Ohio was then, and had been for years, a heavy purchaser of Pittsburg's many products, and paid the balance due the city largely in state bank notes. But in that state the law compelled the banks to redeem their notes in specie or pay twelve per cent. interest on their failure to do so. This helped Pittsburg very much, but it did not prevent the circulation of Ohio bank paper in Pittsburg, for many of the banks could not redeem and were forced by process of law if necessary, to pay twelve per centum interest.

The chief feature of the panic of 1837 was the scarcity of money, and this was so pronounced that many dealers were compelled to resort to the primitive method of barter in the exchange of commodities. Politics entered largely into the panic. Martin VanBuren, as the successor of Andrew Jackson, was president of the United States. He had been intimate with Jackson and as vice-president during the great war on the United States Bank, had borne his share in the contest. Naturally he and his friends were closely affiliated with the state banks, for to protect them, had been assigned as one reason why Jackson had opposed the Bank of the United States. Now that the excessively hard times had followed, there were not a few who saddled the difficulty on VanBuren as the successor of Jackson for the former sought to carry out his policy, particularly that part of it which related to banks. The VanBuren adherents were, therefore, put on the defensive. The ills in Pittsburg were charged to the banks, and to the movement in May, 1837, which requested the banks of Pittsburg to suspend specie payments. Forgetting that the financial distress was common in all parts and in all cities of the nation, the opponents of the Jackson-VanBuren policy and of the administration generally, could see no other cause for the difficulty. With little else to engage their time the city swarmed with curbstone statesmen who pretended to see and portray the cause of the evil and its remedies more clearly than the brightest financiers and economists of the nation. Gradually the situation changed in Pittsburg and from a decided majority, in

1837, who favored suspension, the weight of opinion was decidedly on the other side, and the opinion elsewhere in the state did not differ radically from that of Pittsburg. David Ritner was then governor of the state, and in the exercise of powers with which the chief magistrate was then vested, issued a proclamation on July 10, 1838, demanding that the banks of the state should resume specie payments on or before August 13th following. There being no telegraph lines in that day, the news of the proclamation reached Pittsburg by stage coach mail on the 13th and was received with great joy by the people, many of whom regarded it as a sure and speedy remedy for the financial ills to which they were subjected. The usual public meeting in the court house was called for July 18. It was the most enthusiastic meeting they had had for some time. William Eichbaum was made president and Cornelius Darragh, Thomas Bakewell, B. M. Lowry, R. M. Riddle and S. M. Darlington were made vice-presidents. The first business before the meeting when it was once organized, was the reading of the resumption proclamation issued by Governor Ritner, and it, as may be surmised, was followed by long continued cheers and applause from all who were present. A committee was appointed to draft resolutions expressive of the sentiment of the meeting. When the committee retired to deliberate, the audience was addressed by W. W. Irwin and A. W. Foster, both eminent and eloquent members of the bar. The resolutions endorsed the action of the governor, and called on the banks to aid him in restoring the currency. The people were so delighted with the proclamation that they determined to celebrate August 13 as Resumption Day and they appointed a committee of a hundred to prepare for it. A committee was also appointed to communicate with the banks and give them copies of the general resolutions. This committee was composed of Edward D. Gazzam, Thomas Hamilton, Robert Porter and J. B. Butler. There were other meetings but none so important till the 13th of August, the day fixed for the celebration came. This was held on Beale's Island and was a most glorious occasion for Pittsburg, Allegheny and other rising towns. Cornelius Darragh was chairman of the committee to prepare for the celebration and called the multitude to order. William Leckey was elected president, and began the day's proceedings by having W. W. Irwin read again the proclamation of the governor. The people were then addressed by Judge Henry M. Brackenridge and others. In the meantime the committee appointed for that purpose had communicated with the banks, and the letters received were read to the assemblage and were received by them with great applause. The Bank of Pittsburg replied on August 6, saying, "this bank is now paying specie for all demands made by presentation of its notes; it has been doing so for some time past for reasonable demands," and that it had been "prepared to pay specie for all its liabilities for some months past, providing the banking institutions east and west had gone into a course of action to warrant payment of this nature." The other banks had answered in nearly the same terms. All of them had either already resumed in whole or in part, and

were ready to resume in full on the day appointed. These letters were read by the eloquent Dr. Edward D. Gazzam, and raised the audience to the highest pitch of excitement. It was thus that resumption was brought about in Pittsburg, even before the time limit fixed by the governor. But as the reader may suppose, it did not cure the hard times which were due to other causes entirely. Money seemed to be but little more plentiful during the year or more following than it had been before. The people were slow to abandon the charge that most of their misfortunes originated with the banks. Anti-bank meetings with bitter resolutions followed. Though all of the banks in the state had practically resumed on the day fixed by the governor, it was generally believed afterwards that the finances of Pittsburg would have been in a better condition had the day been put off a year or more. In October, 1839, many of the banks of the East were again compelled to suspend specie payments, and on October 13, all of the banks of Pittsburg, save the Bank of Pittsburg, were forced to do likewise. To avoid suspension, it was compelled to almost cease discounting notes and to collect loans which it had made, and in some instances to greatly inconvenience its patrons. All the other banks became hostile to it and its patrons whom it could no longer accommodate with money were not inclined to uphold it, though it was but fulfilling its promise and obeying the law in paying specie. People then looked to the legislature to pass a law imposing penalties and a forfeiture of charter, on banks which would not resume and continue the resumption. But it was found by the legislators that the hard times had reduced the treasury of the state to such a condition that its only remedy was to borrow money, and that there was no source to which it could appeal with hope of assistance save to its own banks. They in turn, almost with one accord, gave out that they would not advance the money to the state, if the legislature passed a resumption act. The people of Pittsburg circulated a petition which was signed by about a thousand citizens, asking the legislature to repeal all bank charters. There seemed at this time to be a general war among the newspapers in Pittsburg against all banks. Three of the leading banks published statements to show their financial strength. These came out in October, 1840.

THE STATEMENT OF THE BANK OF PITTSBURG WAS AS FOLLOWS:

Capital	$1,188,290.00
Notes in circulation	64,420.00
Amount due depositors	350,849.26
Notes and bills discounted	1,001,447.37
Specie on hand	205,151.41

THE EXCHANGE BANK MADE THE FOLLOWING STATEMENT.

Capital	$895,980.00
Notes in circulation	580,795.00
Amount due depositors	136,624.99
Notes and bills discounted	929,513.86
Specie on hand	98,907.69

THE MERCHANTS AND MANUFACTURERS BANK MADE THE FOLLOWING STATEMENT.

Capital	$600,000.00
Notes in circulation	331,857.50
Amount due depositors	197.145.82
Notes and bills discounted	537,162.85
Specie on hand	96,057.86

These three banks with nearly a million of bank notes in circulation had but a few dollars more than $400,000 specie to redeem them with. The legislature solved the dilemma of resumption and loan to the state by passing the bill afterwards known as the resumption bill of 1840, which made it mandatory on all banks to resume specie payments on or before January 15, 1841, and enacted further that such banks as had suspended or should suspend specie payments before that date, should loan the state, each one its share as called on, $3,100,000. The penalty for non-compliance with the law was a forfeiture of their charter. Some of the banks resumed but suspended again shortly after. The banks of Pittsburg resumed and continued to pay specie. The newspapers sustained the banks in Pittsburg with more loyalty than they had done before, and in this they led the general sentiment of the people. As a result the notes of the several banks in Pittsburg circulated side by side with gold and silver, and brought generally a small premium, always, we believe, the same premium that specie commanded. Money, however, could only be had at a ruinous rate of interest. The relief bill passed by the legislature in 1841 permitted the issue of money in small denominations, and the city was soon flooded with them. All kinds of money, as it was called, was found in Pittsburg. But the city and the county at large had seen the worst of the panic of 1837. In 1840 and 1841 times brightened in all parts of the United States. The country had reached the bottom of the abyss to which reckless speculation, over-confidence and over-reaching in business had hurled it. A very potent factor in re-establishing business and public credit was the election of Harrison over Van Buren in 1840. The hard times during almost the entire administration of the latter were, in a great measure, unjustly attributed to his policy and to Jackson's hostility to the Bank of the United States, the main principles of which were followed during Van Buren's administration. The business man and the laboring man were both idle, and as a result, devoted their time largely to politics and to the excitements of the campaign. The change of policy which they hoped to gain undoubtedly strengthened the faith of the people, though brighter days were dawning before the election. Business started up gradually, and in return for her products, specie again appeared in Pittsburg. The three banks, whose statements of 1840 are given above, made their affairs public again in November, 1841, and each showed specie on hand in a sum in excess of its bank notes in circulation. The Bank of Pittsburg did not contribute to the $3,100,000 loan to the state, for it did not suspend after the act was passed. Each of the other banks contributed, and were allowed to issue $1 and $2 notes for three-fourths of the amount.

The revival of business in 1841 and 1842 practically closed a long and almost continuous warfare in Pittsburg on the bank and money question. While it seems to us now, to have been an expensive and unnecessary contest which might have been obviated by better legislature, it was, in reality, the formative period through which the people and the banks were passing; a period of turmoil that was necessary to work out and bring into existence the more equitable banking laws of modern times.

The issuing of paper money was not confined to banks in former days. When a bank was compelled, by the stringency of money, to suspend specie payments, it issued its own paper, by which it promised to pay the amount stated in gold at some future time. This same privilege was not exclusively granted to them by their charter, but was common and open to any company, corporation or individual, whose credit was sufficient to float the paper. The bridge companies, turnpike companies, and even small corporations, trading companies and individuals employed engravers who made plates from which were printed bills in small denominations, somewhat resembling our modern paper money, but of a very inferior quality. There being no law to prevent it, this was perfectly legal. They were usually for small sums and were often worth less, and some of them very much less than their face value, though while specie was generally in circulation they passed for par. Unfortunately they were issued mainly when specie was scarce, and resulted in driving from the current market, what little gold and silver remained. Of inferior work, as to the engraving, printing and paper, they were easily counterfeited or easily raised from a lower to a higher denomination. This species of currency was much more common in Pittsburg than in the adjoining county districts. Strangers who came to Pittsburg not infrequently refused to accept it. This paper money was a great nuisance, for no one knew whether the party or company which issued it was able to redeem it or not. It had grown so common in Pittsburg in 1818 that a meeting of the merchants, bankers and citizens generally was called for September 26, the purpose of which was to devise some means of freeing the city from it. Ebenezer Denny was chairman of this meeting, and Alexander McClurg, the iron-master, was secretary. The meeting appointed the cashiers of the three banks in Pittsburg, viz.: Alexander Johnston, Morgan Neville and John Darragh, to receive subscriptions from the business men of Pittsburg, of the amount of specie they would take. The three cashiers were instructed then to procure a shipment from the East of the total amount of specie thus subscribed and on its arrival they were to divide it around among the subscribers. The meeting then resolved that after sixty days those present would not take in change nor give currency to any money or note issued by any bank, corporation, company or individual, for any denomination under one dollar. This measure probably brought relief, but at best it was only a temporary one. The city councils had often paid their debts with city bills when their treasury was empty, and on February 26, 1825, authorized the issuing of six thousand dollars in city bills

of one and two dollar denominations, and providing that they should bear interest from date. This issue, as the ordinance providing for it reads, was "for the redemption of old, worn and defaced city bills now in circulation," and they were to be redeemed by the money collected by the city in fines, forfeitures, debts and taxes; the city further pledged its corporate property for their redemption. Another issue was authorized in January, 1829, and in October following a third of $5,000 was provided for. The promise of the city to redeem these notes kept them very nearly at par, for they seldom passed for more than one or one and a half per centum discount. In all the city had in circulation in these one and two dollar bills, including the interest due on them, $12,389.69. There were also in circulation a class of bills known as water certificates, which bore interest, and the redemption of which was guaranteed by the city. At the close of the year 1828, the regular city bill issue and interest unpaid amounted to $14,625, while the water certificates outstanding at the same time amounted to $59,900, or $74,525.

The people of that day thought they could not do without this currency. Many of the financial transactions which are now performed with checks, were then purely monied transactions. All small bills were paid in gold and silver, or bank notes, and considering these transactions, specie was undoubtedly scarce compared with the amount in circulation in our day. Therefore when the legislature passed an act in 1828 providing that notes of a less denomination than five dollars should not thereafter be issued, and that all such notes extant should be withdrawn, there came a flood of remonstrances from all parts of the state. These were so numerous that a committee was appointed by the legislature in December to investigate the matter and report the results or effects of the act. The report of the committee is a dissertation on the interchange of commodities, depreciated currency and its evil effects on the poor man, etc. It discloses the fact that many contractors on internal improvements then going on in Western Pennsylvania were given to purchasing the depreciated currency and paying their workmen with them, and that some of these notes were issued by small, unknown banks with the name New York or Philadelphia in large letters, but prefixed by the word "near" in small letters, for the purpose of deceiving the inexperienced and careless vendor or laborer. The report sustained the action of the legislature in the passage of the bill.

Pittsburg was very prosperous at that time, yet the newspapers and the people clamored for two dollar bank bills, saying and reasoning that in all three and five dollar transactions silver would then have to be used to the extent of one dollar at least, and this would serve to keep the paper at par.

The issuing of this kind of currency was kept up for a half a century, particularly in large towns, and was most common when business was brisk and where there were many large companies. During the Civil war it was plentiful all over the country for then, silver and gold being at a large premium were entirely retired. They circulated with the small denominations ranging

from three to fifty cents, issued by the government. The country was not finally freed from them until the act of congress known as the Resumption Act went into effect on January 1, 1879. The National Bank act of 1863 gave to national banks the exclusive privilege, outside of the United States treasury itself, of issuing money, but even their issues must be procured from the government, and can only be issued by being signed by the officers of the bank.

CHAPTER VII.

Banking Business Continued.

From Thurston's "Pittsburg as It Is" we learn that the private banks of 1857, all of which were empowered to issue and were issuing notes, were as follows: N. Holmes & Son, established in 1826; S. Jones & Company, established in 1837; Cramer & Rahm, in 1841; Hill & Company, in 1845; Hanna, Hart & Company, in 1846; Harris & Company, in 1848; William H. Williams & Company, in 1848; O'Connor, Brother & Company, in 1851; R. Patrick & Company, in 1851; John Woods, in 1852; Rodgers & Company, in 1854, and W. A. Herron & Company, in 1855. From the same source we give the following list of incorporated companies, all of which were empowered to issue notes and were doing business in 1857: Farmer's Deposit Bank, Citizens Deposit Bank, Pittsburg Trust Company, Commercial Bank, Dollar Savings Bank, Allegheny Savings Bank, Mechanic's Saving Fund Company, Merchant's & Farmer's Bank, Manchester Savings Fund Company. After these came: Semple & Jones, in 1859; Robinson Brothers, in 1864, and T. Mellon & Son, in 1870.

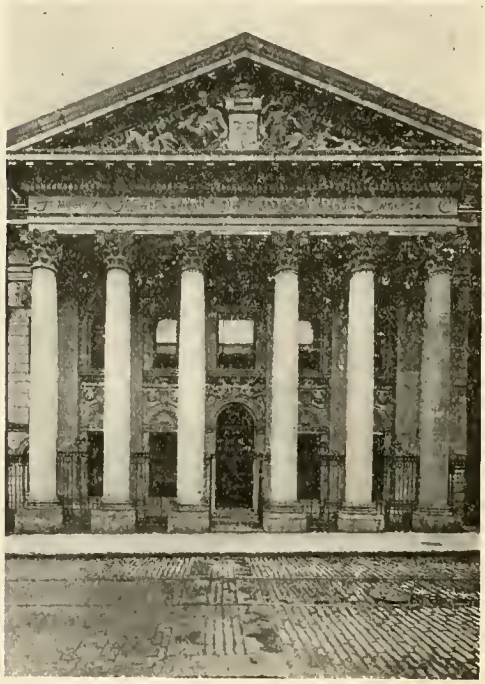
Aside from a gradual reformation of the general banking law, and a gradual increase in the number and strength of the banking institutions of Pittsburg, there is little to tell of the history of the city's banking interests between 1840 and the first years of the Civil war. With the financial depression or panic of 1857, all of the banks in the city, save the Bank of Pittsburg, and most of the banks of the Union, were again compelled to suspend specie payments. The depression was a mild one compared with that of 1837, and after a few months' suspension they were able to resume again. The suspension which came with the first year of the Civil war, and lasted until the act of congress which took effect on January 1, 1879, was common to all sections of the Union, and had no special bearing on Pittsburg or on Pittsburg banks whatever. It is therefore not within the province of this work to deal specially with it.

As a result of the Civil war, growing out of the bonds issued by the government for the purpose of carrying on the war, came the National Bank Act. When it was apparent in 1861 that war was imminent, the state legisla-

ture suspended the forfeiture of charter act which applied to banks having suspended specie payments, and by later acts this suspension was extended indefinitely. On the day before this suspension act was passed the bankers of Pittsburg had a meeting, and with that loyalty which characterized them throughout the Civil war, authorized one of their number to inform the governor that they would cheerfully respond to the state's call for loans to enable the government to sustain the constitution and the laws. This offer was made good in many ways. When the government proposed in the fall of 1861 to raise $250,000,000 by the sale of 7-30 bonds, that is bonds bearing seven per cent. and payable in thirty years, the Exchange Bank on the first day possible, subscribed for $100,000 of them, the Citizens' Bank for $60,000, and the Merchants' and Manufacturers' Bank for $50,000. In a few weeks nearly $400,000 of them had been taken in Pittsburg. . In the early months of 1862 gold and silver disappeared owing to the fact that paper money was at a discount. Gold retained its face value and silver nearly so, but paper money fluctuated, and in the popular language of the day, gold was at a premium. In comparison with the increased value of other commodities, gold had changed but little. Its standing in the market did not depend on the success of the government, or on its ability to pay, but rather on the supposition that it was intrinsically worth its face value. This apparent fluctuation of specie brought about great speculation, then called gold gambling, based on its probable fluctuation. It also produced in Pittsburg and elsewhere a great scarcity of small change, which before that time had consisted largely in silver and gold. This was relieved by a national issue of small currency. In the fall of 1862, $50,000 of it was sent to Pittsburg for distribution, and it was all taken in a few hours, by paying for it in larger bills, and it did not half supply those who were clamoring and really suffering for it in their business affairs. Five weeks later, on December 15, $30,000 were sent to be distributed by supplying each individual with fifteen dollars. Long before the custom house doors were open the approach to it was densely crowded with people, all of whom were struggling to be nearest the door. Soldiers were called out, who with bayonets cleared the yard and forced the people to form a line so that each might take his turn. Gold advanced steadily in value and after it passed 120 it almost entirely disappeared, but the small currency issued by the government, called postal currency, could be secured at the custom house at any time. The gold and silver was in the bank vaults, and could have been had at any time by paying the premium, but this fluctuated so and was so hard to count that paper money was preferred. When Pittsburg was threatened with an attack of the Confederate army, the banks shipped their specie to Cleveland, a city less likely to be attacked. On June 15 and 16 the express company took twenty-two millions of specie from the vaults of Pittsburg to Cleveland. During most of this time the paper bank notes issued by the Bank of Pittsburg retained their face value in gold, and when gold was at its highest point these notes were in reality, "as good as gold." Not infrequently a ten dollar

bank note on the Bank of Pittsburg paid a debt of 20, 25 or 26 dollars, according to the premium of gold. The early sixties were years of wonderful activity in business in Pittsburg. Almost every product found a ready market at a high value, and this was particularly true after Salmon P. Chase, then secretary of the treasury in President Lincoln's cabinet, introduced his well known policy in finance, the result of which placed the nation on a solid financial basis that it has since maintained.

Until the passage of the National Bank Act state banks retained their old privilege of issuing bank notes. There were then seven old and well established banks in Pittsburg. The Bank of Pittsburg began to call in and cancel its circulation. When the war began it had out $194,966, but this was gradually reduced till in May, 1864, it had only $28,596. The Exchange Bank added to its bank notes during these years, and increased them from $1,032,850, to $1,930,000 in 1864. The Merchants' and Manufacturers' Bank having $550,805 in 1861, had $1,160,565 in 1864; the Citizens' Bank circulation increased from $410,500 to $928,-879; the Mechanics' Bank increased from $249,380 to $965,-683; the Iron City increased from $256,325 to $770,835; the Allegheny from $425,430 to $947,144. The amount of specie decreased with all the banks except the Merchants' and Manufacturers' Bank, the decrease showing most in the Bank of Pittsburg because of its constant redemption of its notes. All of these banks, save the Exchange, Citizens' and the Allegheny, had decreased their loans in these years. The Bank of Pittsburg had increased its deposits from $651,203 at the beginning of the war to $1,606,422 in 1864. This was about twice as much as any other bank in the city had on its deposit, and was due largely to the name it had earned by its long continued specie-paying policy. The Exchange Bank had had sufficient faith in the government to purchase $1,367,000 of its bonds, and in this stood first among the banks of Pittsburg. The Merchants' and Manufacturers' Bank deserves special mention in this connection, for it had purchased $1,342,970. All of the banks of Pittsburg did nobly during the Civil war. They were looked to to contribute to all sums raised to pay bounty, establish hospitals, feed soldiers, etc.



THE BANK OF PITTSBURG

These calls came very frequently, and the solicitors rarely ever left a bank empty handed. To the Sanitary Fair, the most successful money raising project of Pittsburg connected with the war, the Exchange Bank contributed $2,000, while the Bank of Pittsburg, the First National, the Merchants' and Manufacturers', the Allegheny, the Citizens' Bank, and the banking house of N. Holmes & Sons, each contributed $1,000. In all the banks contributed $12,350, to this most worthy cause, the Sanitary Fair.

When the National Bank Act was passed, the state followed with legislation which enabled the state banks to surrender their state charters and become national banks if they so desired, and they were given three years to wind up their affairs under their state charters. They could no longer issue bank notes under their old state charters, for this conflicted with the national law. The state banks called in and redeemed their notes, but they did not redeem them in gold for the reason that the legal-tender act passed by congress enabled them to pay them in the current money of the government. This act, however, did not apply to bank notes issued before its passage, and this question on a contested case was so decided by the supreme court of the United States in 1870. All of the old banks of Pittsburg had notes of that kind outstanding except the Bank of Pittsburg, and they were, after this decision, worth more than the current money of the government or the national bank currency, for they were worth their face in gold after the decision of 1870, and on that basis were redeemed.

The National Bank Act was but a reflection of the financial policy of Secretary Chase, and finally became a law on February 25, 1863. While it was yet pending many bankers in the Union concluded to avail themselves of the opportunities it afforded. The first bank chartered under the new law in Pennsylvania, and indeed the first in the United States, was the First National Bank of Philadelphia. Before the act had passed the Pittsburg Trust Company arranged to become a national bank if the bill became a law, and so wrote Hugh McCulloch who was then comptroller of the currency. Other applications had preceded theirs, or at all events were acted on first, so that they received charter No. 48. The certificate authorizing them to organize as a national bank bears date of June 1, 1863. Under this authority they organized and were duly authorized to begin business by a certificate of the comptroller to be dated August 5, 1863. Their capital stock was $400,000, and the incorporators were James Laughlin, William K. Nimick, Robert S. Hays, Francis G. Bailey, and Thomas Bell. They began business as the First National Bank of Pittsburg under the new organization on August 8, 1863, with James Laughlin as president, and Jno. D. Scully as cashier. The directors were: James Laughlin, Robert S. Hays, Thomas Bell, Thomas Wightman, William E. Nimick, Alexander Speer, Francis G. Bailey, Alexander Bradley and Samuel Rea. Shortly after they were organized they increased their capital stock to $500,000. The new currency, which then as now the law authorized them to issue, was hailed with great joy by the Pittsburg

newspapers, and by the people generally. They understood that back of it and pledged for its redemption, were government bonds owned by the bank, but deposited with the United States treasury. They saw that this currency and that of other national banks, which they felt confident would soon follow, would certainly drive from the market the fluctuating and unreliable currency with which they had been annoyed more or less since banking first began in Pittsburg. Allegheny was not far behind Pittsburg in securing a national bank, for on December 2, 1863, books were opened for stock subscriptions, and before noon more than $100,000 were subscribed, and in a few days $50,000 additional was secured. It was called the First National Bank of Allegheny, and its first directors were: T. H. Nevin, C. C. Boyle, R. H. Davis, Arthur Hobson, D. N. White, John Thompson, W. Harbaugh, Henry Gerwig and John Dean. The Iron City Trust Company with a capital of $300,000 was authorized to begin business as the Second National Bank of Pittsburg on February 13, 1864. The Third National Bank of Pittsburg began business on March 7, 1864. They opened it in the Dime Savings Institution, but shortly afterwards erected a fine structure of their own on Virgin alley, and Wood streets. It was the finest banking building in the city when it was finished. A number of leading coal merchants of Pittsburg organized the Fourth National Bank in April, 1864. James O'Connor was elected president, and S. D. Herron cashier. In a year after it began business as a new institution entirely, it had on deposit $1,666,385.19, and had loaned $903,888.35. The First National, in its statement at the same time, showed a deposit of but a few dollars less than two millions of dollars ($1,995,050.93). The Fourth National had been organized but a few months till its stock of $100 shares sold for $160. The success of these banks made the national bank scheme a very popular one in Pittsburg. Rapidly following them came the Pittsburg National Bank of Commerce with a capital of $500,000, the Iron City National Bank with a capital of $400,000, the Citizens' National Bank with a capital of $800,000, the Mechanics' National with a capital of $500,000, the Tradesmen s National with a capital of $400,000, the Farmers' National with a capital $300,000, the Merchants' and Manufacturers' National with a capital of $800,000, the Union National with a capital of $250,000, the People's National, and the Exchange National, each with a capital of $1,000,000. All were organized before May 1, 1865. Thus there were in Pittsburg and Allegheny seventeen national banks with nearly eight millions of capital. The bank currency which these banks were enabled by law to issue was indeed sufficient as had been predicted by the newspapers, to drive all wildcat currency from the city.

The close of the Civil war saw the national banking business firmly entrenched in Pittsburg, and the same may be said of all other kinds of banking. The years which followed the war were years of great activity in all business enterprises all over the country. This was particularly true in Pittsburg, where the iron and steel trade which a few years later, almost revolutionized the business of the country, was rapidly increasing. The discovery of oil,

moreover, in Western Pennsylvania, added millions of wealth to the city's already rapidly filling vaults. The banking business flourished accordingly from the close of the war up to 1873. The Enterprise, the International, the Commercial Banking Company, the Germania Savings Bank, the Artisans', the Freehold Bank and Building Association, were all organized in 1870. In 1871 came the Germania Savings and Deposit Bank, the United, the National for Savings, the West End Savings, the Security Trust Company, the Fifth National, the Arsenal Bank and the Iron and Glass Dollar Savings Bank. In 1872 came the Mechanics' (Birmingham), the Odd Fellows Savings Bank, the Real Estate Loan and Trust Company, the Allegheny Homestead, the Shoe and Leather Bank, the Monongahela Savings Bank, the Weekly Savings Bank, the Liberty Improvement Bank, and the Bank of Industry. The Market Bank, the Penn Bank and the Anchor Savings Bank were organized in the early part of 1873. All this increased business again led to over-speculation. Many business ventures were made on borrowed capital largely, and with a few years of business prosperity, the debt was paid off. But when hard times came on suddenly, before the venture had time to realize great profits, such establishments were generally forced to suspend, and not infrequently wound up in bankruptcy. Jay Cooke, an eastern banker of high repute, had been eminently successful during the Civil war in placing bonds of the United States. In 1873 he was at the head of a banking company of New York City. Through misfortunes, which were not attributed to dishonesty and scarcely to bad management, his banking house, Jay Cooke & Company, was forced to close its doors on September 18, 1873. Because of the high standing of Cooke, the failure of his house unsettled the banking interests of the entire country. Depositors rushed to the banks for their money, and many of them were forced to the wall within a few days. The press of Pittsburg stood up loyally for the home banks. The strongest institutions in the city, in view of the impending calamity, and fearing that a run would be made on them, tried to provide against it by ordering currency from New York, where they had large credit, but learned that no bank notes could be spared from or would be allowed to leave the city. The small banks in the country surrounding Pittsburg drew their deposits from Pittsburg at once, yet they withstood all this and seemed in a fair way to pull through. The Security Trust Company was the Pittsburg representative of Jay Cooke & Company, and closely associated with them was the banking house of James T. Brady & Company. These institutions were subjected to a constant run for several days, and both went down on September 22. Brady had borrowed heavily from the company, in fact, disregarding the law, it had loaned him more than its paid-in capital stock. He had invested this money in railroad speculation in Ohio, and was unable to realize from it when the creditor needed it to sustain itself. The immediate cause of both suspensions was therefore their illegal manner of doing business. Their failures plunged Pittsburg into a financial panic. Other

failures, such as the Lawrence Savings Bank, the Nation Trust Company, Ira B. McVay & Company, the Duquesne Savings Bank, the Savings and Deposit Bank, S. McLean & Company, followed rapidly, and each failure made it more difficult for the solid institutions to stand. In 1874 the failures continued, and the panic had so spread throughout the country that all kinds of business were paralyzed. It was the gloomiest year of the panic for the banking circles of Pittsburg, and 1875 was but little better, if any. The total exchanges of the clearing-house took a downward plunge in 1874 and kept on going down until they reached the lowest point in 1878, after which they arose rapidly for business was resumed in all sections of the country. The panic was most severely felt by the banking institutions in Pittsburg during the first and perhaps the second years, for after that matters largely adjusted themselves to the restricted business of the city. In 1880 the banks of Pittsburg were again riding on the top-most wave of success, and though a depression came in 1883, which reduced their clearing-house exchanges for 1884 and 1885, it was not characterized by heavy failures nor by great privations generally. In the meantime many of the weaker institutions which had been founded by the over-confidence of the early seventies had passed away. Among these were the Allegheny Trust Company, the Allegheny Savings Bank, the Artisans' Deposit Bank, the Bank of Industry, the Franklin Savings Bank, the Franklin Savings Fund and Safe Deposit Company, the Homestead Bank, the Improvement Trust Company, the International Bank, the Keystone Bank, the Penn Avenue Trust Company, the People's Savings Bank, the Pittsburg Savings Bank, the Real Estate Savings Bank, the Security Trust Company, the United States Bank, etc. These had not all failed, some of them having wound up their affairs and passed out of business, presumably because the shrinkage in the finances of Pittsburg no longer warranted their continuance. The failure of the Penn Bank in May, 1884, was a very severe one because of the disaster it created. It was one of the most marked instances of the over-confidence of both the people and the bankers in the history of Pittsburg. It closed its doors on May 29, but in a day or so received assistance which enabled it to open them again. This renewed the confidence of the people in the institution which had almost universally been regarded as one of the strong institutions of Western Pennsylvania. The day following the reopening its stock in the market was openly bid off at 107, 100 being par. Depositors came with money and all manifested unbounded confidence in its strength. Then came the second and final collapse, the effect of which was much worse on the standing of the other banks than had it not been re-opened. This was followed almost at once with indisputable evidence that the bank was a mere speculative bubble, and so weak in resources that its depositors received practically nothing. So far as the shaking of confidence in really reputable institutions is concerned, this was the most serious failure in the history of Pittsburg.

Then came a period of nearly ten years of business thrift in Pittsburg,

the result of which was to make it a leading factor in the banking interests of the United States, for it will be understood that the banking interests depend principally on the products of the city and its immediate localities. New banks came with the increased output of the varied industries, until in 1893, Pittsburg alone had over fifty banks, the aggregate capital of which was $16,241,540. The combined deposits of the banks of the county was $89,000,000. This sum would be greatly augmented if it were possible to know the capital employed in private banking. A depression came in 1893, which showed itself in a material falling off in the exchanges of the clearing house. The total exchanges were nearly $70,000,000 in January, and were reduced about twenty per centum in February, and continued to drop off from month to month until June, when it became evident that the country was on the threshold of another panic. Failures in all parts of the country, not only bank failures but failures in all branches of business, revealed in some degree at least, the condition of affairs. The Pittsburg banks were called on by county bankers for all they had with them as reserve fund, but when the former called on New York banks they were generally refused, for banks in the East were almost daily being driven to the wall. Currency was very scarce in New York, and was bought and sold as though it was a regular output of an industry. Call loans with good security brought as much as seventy-five per centum. New York bankers in June prevented themselves from ruin by resorting to clearing-house certificates. Pittsburg banks had never done this, we think, to any extent, but they were compelled to do so in July and August, 1893. The hard times continued for nearly four years. The factories of Pittsburg were generally shut down, and thousands of men were at once thrown out of employment. These had to be cared for by the more fortunate and soup-houses kept up by public benefactions became necessary. The banks suffered severely, but most of them bore up with great fortitude, and were not slow in contributing to the public charities which the hard times made necessary. Gradually in 1896 and 1897 business was resumed, and both manufacturers and bankers started on a new era of business prosperity that has never been even approximated in the history of Pittsburg.

The clearing-house is a great factor among the banking institutions of Pittsburg, and its exchanges from year to year show in a nutshell better than can be shown in any other way, the immense banking business of the city. The idea of establishing a clearing-house was first talked of in 1862, when there were but five in the United States. New York had established the first in 1853, and Boston started one two years later, while others followed in Philadelphia, Cleveland and Baltimore in 1858. The great, the almost unprecedented increase in banking in Pittsburg in the sixties made a clearing-house almost if not altogether necessary. The bankers of Pittsburg began to talk seriously over the matter in 1864, and it was generally agreed among them that it should be started in the early part of 1865. The matter was neglected until May 26, when a meeting of the leading bank cashiers of the

city was held, the object of which was to make definite arrangements, to form an association, to engage convenient quarters, and secure the co-operation of the banks of the cities. A committee was appointed to attend to these matters, and Mr. J. P. Cramer was appointed to prepare a constitution and by-laws. For the next ten days the committee worked diligently, and by June 5th the preparatory work was well in hand. The constitution which had been prepared was submitted and adopted, and was at once signed by the proper officers or representatives of eighteen banks. A room was secured over the Bank of Pittsburg, and under the name of the Pittsburg Clearing-House Association, they began business in 1865, but did not keep a regular record of their transactions until February 5, 1866. John Harper was the first president of the association. The following table shows the volume of business done by the clearing-house each year since January 1, 1866.

Year.		Year.	
1866	$ 83,731,242.17	1887	511,010,701.38
1867	97,157,556.03	1888	581,580,644.69
1868	115,296,621.33	1889	654,080,356.93
1869	156,880,910.90	1890	786,156,221.40
1870	178,409,905.51	1891	675,876,995.27
1871	215,201,413.59	1892	759,530,746.06
1872	284,859,477.08	1893	665,328,769.11
1873	295,754,758.33	1894	652,907,141.32
1874	257,548,600.75	1895	746,110,263.85
1875	233,160,448.36	1896	745,428,891.25
1876	224,758,910.43	1897	819,637,017.03
1877	223,569,252.09	1898	975,451,815.24
1878	189,771,695.27	1899	1,528,478,652.51
1879	217,982,649.43	1900	1,615,641,592.19
1880	297,804,747.21	1901	2,047,605,967.67
1881	389,170,379.10	1902	2,147,969,763.71
1882	483,519,704.53	1903	2,356,875,351.36
1883	497,653,962.43	1904	2,063,226,830.47
1884	469,316,009.68	1905	2,506,069,215.96
1885	356,171,592.53	1906	2,640,847,046.00
1886	409,155,367.10		

Below we give an extract from the statement made by twenty-five national banks of Pittsburg on August 22, 1907, showing the deposits, surplus and profits and showing the year's increase by including the statement made by the same banks on September 4, 1906.

	DEPOSITS		SURPLUS & PROFITS		
	Aug. 22, '07	Sept. 4, '06	Aug. 22, '07	Sept. 4, '06	Year's Div.
First National Bank	$ 19,036,263	$ 18,264,275	$ 2,594,866	$ 2,492 380	$ 200,000
Second National Bank	12,797,346	11,847,680	2,257,407	2,154,532	180,000
Third National Bank	1,094,457	981,985	251.560	244.916	30,000
Allegheny National Bank	3.185,325	3,233,894	807,840	767,165	40,000
Bank of Pittsburg, Nat. Ass'n	16,808,998	18,105,167	2,850.547	2,697,295	288,000
Columbia National Bank	9,705,796	8,510.008	1.225,932	1,195,576	96,000
Commercial National Bank	1.820,685	1.747.217	246,355	233,955	24,000
Cosmopolitan National Bank	782,304	697.622	148,076	137,353	30,000
Diamond National Bank	5,015,780	5,309,991	1,649,796	1,638,285	120,000
Duquesne National Bank	2,641,706	1,963,068	849,261	799,667	60,000
Exchange National Bank	2,026,026	2,246 091	818,392	806,585	72,000
Farmers Deposit National Bank	24,328,590	21,725,237	*2,722,110	7,597,020	360.000
Federal National Bank	3,137,411	3,074,409	1,316,918	1,301.152	80,000
Fort Pitt National Bank	3,101.697	2,652.352	1,128,446	1.084,522	80,000
German National Bank	4,260,622	4,348,745	777,993	736,289	60,000
Keystone National Bank	3,912,415	4,112,521	915,896	878,432	70,000
Lincoln National Bank	3,501,453	2,928,256	871,099	857,807	60,000
Marine National Bank	1,045,787	1,094,031	121,788	109,605	12,000
Mellon National Bank	32,825,544	31,524,964	2,047,678	1,610,034	240,000
Metropolitan National Bank	814,766	780,006	373,998	365,632	32,000
Monongahela National Bank	5,250.462	4.810,698	1,793,777	1,781,432	120,000
National Bank of Western Penna	2,509,808	2,657,741	534,153	519.000	40 000
Peoples National Bank	11,936,028	11,927,934	1,756,941	1,642,163	160,000
Union National Bank	6,843,166	5,867.380	5.185,766	5,186,396	240,000
Washington National Bank	1,037,637	1,121,410	159,989	146,089	18 000
Totals	$ 179,421,067	$ 171,532,677	$ 33,404,784	$ 36,983,273	$ 2,712,000

*September, 1906, the Farmers Deposit National Bank converted $5,200,000 of surplus and profits into capital stock.

The capital stock of the seventy-one national banks on August 22, 1907, and the one hundred and seven state banks, savings banks and trust companies on May 28, 1907, of Allegheny county, foot up $72,118,040, and the surplus and profits $111,287,951, an aggregate of $183,405,991. See following tables:

PITTSBURG NATIONAL BANKS	Capital	Surplus and Profits	PRESIDENT	VICE-PRESIDENT
First National	$ 1,000,000	$ 2,594,866	F. H. Skelding	J. L. D. Speer
Second National	1,800.000	2,257,406	H. C. Bachman	G. B. Barrett
Third National	500 000	251,560	Julius Bieler	
Fourth National	300,000	109,438	D. G. Stewart	Frank R. Stoner
Allegheny National	500,000	807.840	Wm. Stewart	Walter Chess
American National	400,000	244,599	Wm. Zoller	Saml. D. Taylor
Bank of Pittsburg Nat. Ass'n	2,400,000	2,850,547	Wilson A. Shaw	Joseph R. Paull
Columbia National	600,000	1,224,932	E. H. Jennings	Frank A. Griffin
Commercial National	300,000	246,355	S. Bailey, Jr	John W. Herron
Cosmopolitan National	500,000	148,076	John McClurg	E. A. Kitzmiller
Diamond National	600,000	1,649,796	William Price	
Duquesne National	500,000	849,260	John Bindley	A. H. Patterson
Exchange National	1,200,000	818,392	M. W. Watson	Frank S. Bissell
Farmers Deposit National	6,000,000	2,722,110	T. H. Given	
Federal National	1,000,000	1,316,988	Hugh Young	J. S. Craig
First Nat. Bank of Birmingham	100,000	193,030	H. S McKee	James W. Scully
Fort Pitt National	1,000,000	1,128.446	Andrew W. Herron	
German National	500,000	777,993	E. H. Myers	L. Vilsack
Keystone National	500,000	915,096	Geo M. Laughlin	W. H. Nimick
Liberty National	200 000	109,296	E M. Biglow	R. B. Ward
Lincoln National	600,000	871,099	C. B McLean	W. R. Christian
Marine National	300,000	121,787	Geo. C. Burgwin	T. J. Wood
Mellon National	4,000,000	2,047,678	A. W. Mellon	R. B. Mellon
Metropolitan National	400 000	373,998	J. Runnette	C. P. Tiers
Monongahela National	1,000,000	1,793,777	J. W. Grove	
Municipal and Corp. Sec. Co.	200,000		Chas. McKnight	J. B. Shea
National Bk. of Western Penn	500,000	534,153	James S. Kuhn	Wm. S. Kuhn
Pennsylvania National	200,000	180,939	J. S. Seaman	R. M. Davis
Peoples National	1,000,000	1.756,641	Robt. Wardrof	D. E. Park
Security Investment Co	3,000,000	5,163.830	R. S. Smith	J. D. Lyon
St. Clair Savings & Trust Co.	125,000	22,000	Geo. Westinghouse	G. C. Smith
Union National	600,000	5,185,766	Henry Henning	Wm F. Zoller
United States National	500,000	215.700	Jasper M. Porter	J. H. McCutcheon
Washington National	200,000	159,989	W. C. McEldowney	John B. Larkin
Totals	$ 29,200,000	$ 34,457,853		

PITTSBURG STATE BANKS	Capital	Surplus and Profits	PRESIDENT	VICE-PRESIDENT
Anchor Savings	$ 100,000	$ 390.472	A. M. Brown	G. W. Eberhart
Allegheny Valley	50,000	38,845	Francis G. Gardiner	F. Lackner
All Nations Deposit Bank	75,000	16,490	Jacob Breiding	P. V. Obiecunas
Arsenal	100,000	138,571	J. Z. Wainright	N. G. Beale
City Deposit	200,000	530.060	J. R. Mellon	D. Blair
Diamond Savings	125,000	155.556	Wm Price	
Farmers Deposit Savings	100,000	83,621	T. H. Given	Hay Walker
Fifth Aveoue	100,000	70,593	Jno. H. Aufderheide	Peter Gettman
Freehold	200,000	1,096,097	John A. Bell	J. C. Chaplin
German Savings & Deposit	100,000	598,707	J. F. Erny	F. Benz
Germania Savings	150,000	511.631	A. E. Succop	L. E. Meyran
Hazelwood	50,000	8,370	H. O. Horaberger	E A. Sweeny
Homewood Peoples	50,000	14,125	J. R. Paull	J. R. McCreary
Iron and Glass Dollar Savings	172,700	349,583	Edw. P. Logan	John Grey
Liberty Savings	100,000	10,171	Ira F. Brainard	Edw. M. Biglow
Manufacturers	100,000	169,501	Jno. C. Steveason	
Park	50,000	15,888	H. P. Bope	Geo. W. McNeil
Pennsylvania Savings	100,000	43,374	J. S. Seaman	R. M. Davis
Peoples Savings	1,000.000	1,292,473	D McK Lloyd	Thos. Wighman
Pittsburgh Bank for Savings	75,000	710,730	Jas. S. Kuhn	L. M. Plummer
Traders & Mechanics	100,000	123.391	Jas E. Glass	Wm. M. Furey
Union Savings	1,000,000	326.892	H. C. McEldowney	A. W. Mellon
Western Savings & Deposit	250,000	308,478	John Dimling	Fred Fichtel
Dollar Savings		1,486,541	A. W. Pollock	C. C. Burgwin
Totals	$ 4,647,700	$ 8,680,586		

PITTSBURG TRUST COMPANIES	Capital	Surplus and Profits	PRESIDENT	VICE-PRESIDENT
Bankers Trust Co	$ 127,350	$ 13,779	Wm. A. Roberts	J. A. Langfit
Central Trust Co	150,000	43,765	Robt. Munroe, Jr	Meyer Streng
Colonial Trust Co	4,000,000	6,280,459	E. H. Jennings	J. C. Chaplin
Commonwealth Trust Co	1,500,000	1,391,443	John W. Herron	Saml. Bailey, Jr.
Continental Trust Co	437,800	108,070	John R. Morrow	A. H. Burchfield
East End Savings & Trust Co	250,000	118,590	Leopold Vilsack	W. R. Kuhn
Fidelity Title & Trust Co	2,000,000	5,007,244	J. B. Jackson	Robt. Pitcairn
Franklin Savings & Trust Co	192,300	42,757	Geo. S. Ward	F. J. Kress
German Trust Co	161,600	100,839	Phillip LeGoullon	Saml. A Sterol
Guarantee Title & Trust Co	1,000,000	919,697	J. R. Paull	S H. McKee.
Guardian Trust Co	185,675	140 039	A. G. Tim	Forman South
Hazelwood Savings & Trust Co	165,400	86,595	W. H. Barker	F. C. Kohne
Hill Top Savings & Trust Co	100,000	31,387	Harry Moore	Chas. Ott
Interoational Sav. & Tr. Co	255,025	20,407	J. H. White	Max Roseobaum
Iron City Trust Co	2,000,000	770,824	Wm. M. Abbott	Geo. E. McCague
Land Trust Co	482,100	111,235	W. J. Griffith	W. W. Giffin
Mercantile Trust Co	701,900	263,199	W. H. Graham	W. H. Fredericks
Merchants Savings & Trust Co	500.000	128,576	Thos. Walker	T. A. Motheral
Metropolitan Sav. & Tr. Co	125.000	15,766	John Runoette	C. P. Tiers
Metropolitan Trust Co	125.000	17,354	John Runnette	C. P. Tiers
Mortgage Banking Co	807,800	11,492	P. V. Roonianck	Anthony Schaub
Mt. Washington Sav & Tr. Co	125,000	16 569	A. L. Richmond, Jr	F J. Torrence
Oakland Savings & Trust Co	200,000	150,615	James J. Flannery	Jas. J. Booth
Peoples Trust Co	250'000	73,010	Wm Ruske	Jos. S. Ploeger
Pittsburgh Trust Co	2,000,000	4,213,194	James I. Buchannon	Chas. H. Hays
Real Estate Trust Co	2,000,000	2,131,204	David P. Black	J. N. Jarvis
Safe Deposit & Trust Co	3,000 000	7,704,397	Robt. Wardrop	D. McK Lloyd
South Hills Trust Co	125 000	18.078	Edwin W. Smith	Kirk Q. Bingham
South Side Trust Co	300,000	54.430	Benj. Page	J. B. Laughlin
Terminal Trust Co	125,000	2.264	Jas. I. Buchannon	Chas. H. Hays
Treasury Trust Co	274,090	55,867	Jas. E. Gloss	Levi Colvin
Union Fidelity Title Ins. Co	250,000	44,791	John C. Slack	John B. Jackson
Union Trust Co	1,500,000	23,460 064	H. C. McEldowney	A. W Mellon
Washingtoo Trust Co	125,000	10,443	H. C. McEldowney	R. R. Whitaker
West End Savings & Trust Co.	125,000	263,401	Robt. S. Hemings	Harry Hershberger
Totals	$ 26,682,640	$ 54,013,324		

	Capital	Surplus	Profit	President	Vice-President
Allegheny					
First National	$ 350.000	$ 100,000	$ 44,140	F. H. Skelding	Wm. L. Gluckert
Second National	300,000	800.000	33.798	J. N. Davidson	Wm. Witherow
German National	200,000	850.000	45,178	F. N. Hoffstot	J. W. Friend
Bank of Secured Savings	125.000	50,000	65,827	R. H. Gillford	W. McMillen
Allegheny Trust Co	700.000	200,000	55,817	W. B. Rodgers	C. W. Dahlinger
Ohio Valley	100,000	20,000	10,173	T. B. Riter	E. W. Moore
Allegheny Safe Deposit Co	100,000				
Dollar Savings Fund & Trust Co	1,000,000	1,000,000	52,003	R. H. Boggs	C. H. Voight
Manchester Sav Bank & Trust Co	250,000	50,000	19,052	Anthony Trimble	Edw. Heer
Workingmans Sav. Bank & Tr.Co	100,000	600,000	24,431	Emil Winter	Thos. M. Rees
Provident Trust Co	150,000	37,500	39,499	Chas. F. Kirschler	E. R. Kopp
Real Estate Savings & Trust Co	400.000	100,000	26,624	James Richey, Jr	Thos. E. Long
McKeesport					
First National	300,000	400,000	100,388	Jas. S. Kuhn	J. W. Bailie
National Bank of McKeesport	200.000	250.000	81,942	James Evans	W. C. Sales
Peoples	200 000	500 000	12,151	E. W. Pritts	H. R. Stuckslager
McKeesport Title & Trust Co	407,100	100,385	31,475	J. W. Painter	J. W. Fawcett
Union National	150,000		14,283	A. B. Campbell	Philip Zenn
City Bank of McKeesport	150,000		37,154	R. G. Donavan	Geo. B. Herwick
Braddock					
Bessemer Trust Co	125.000	5.000	5,182	John G. Kelley	Robert P. Duff
Braddock National	100,000	500,000	66,592	J. G. Kelley	R. P. Duff
Braddock Trust Co	125,000	125.000	9,682	E. R. Dowler	George Nash
First National	100,000	100,000	22,444	James A. Russell	E. R Dowler
State Bank of Braddock	50.000	21,000	5,493	H.C. Shallenberger	Fred T. Rodman
Union National	200.000	50,000	28,142		
Bridgeville					
First National	50,000	13.500	294	George W. Poellot	John M. Boyce
Bridgeville Trust Co	125,000		9,342	John F. Hosack	W. W. Murray
Carnegie					
First National	50,000	60,000	24,737	John A. Bell	
Carnegie Trust Co	150,000	40,000	23.209	John A. Bell	E. G Husler
Carnegie National	100,000	13,000	13,887	R. P. Burgan	George Faunce
Coraopolis					
Coraopolis National	50,000	50,000	12,789	J. A. Ferguson	C. A. Cooper
Coraopolis Savings & Trust Co	125 000		17,150	W H. Adkins,	G. A. Lashell
Ohio Valley Trust Co	185,000	30,000	57,442	J. A. Ferguson	W. S. Ramsey
Duquesne					
First National	50,000	50,000	25,405	James S. Crawford	E R Crawford
Duquesne Trust Co	125,000		17,348	Charles B. Payne	E. Hamilton
Home Title & Trust Co	125,000	10 000	8,750	M. G. Conlin	C. F. Keyser
Hungarian-American Sav. & Tr.Co	125,000	50 000	11,378	J. M. Freidman	Jacob Klein
Elizabeth					
First National	50.000	20,000	15,586	W. P. Pierce	R. T. Wiley
State Bank of Elizabeth	75,000		20,663	James N. Nevin	S. A. Bryce
First National of West Elizabeth	50,000	5.000	5,640	Amos M. Pierce	John A. Snee
Homestead					
First National	100,000	100,000	40,009	Louis Rott	M. H. West
Homestead National	100,000	14,026	2,663	J. D. Stahl	William Martin
Homestead Savings Bank & Tr. Co	125.000		14,299	Peter Feg	F. J. Erbeck
Monongahela Trust Co	200,000	100,000	16,090	Reid Kennedy	A. R. Hunt
McKees Rocks					
First National	100.000	50,000	12,020	T. W. Friend	C. M. Christianson
Chartiers Trust Co	200,000	125.000	34,658	T. W. Friend	M. C. O'Donovan
McKees Rocks Trust Co	225,000	25.000	19,436	E. C. Kleinman	T. H. Watts
Colonial Savings					
Sewickley					
First National	100,000	50,000	32,636	R. J. Murray	E. P. Young
Sewickley Valley Trust Co	125,000	35,000	25.315	Jas W. Grove	F. R. Stone
Sharpsburg					
Farmers & Mechanics	50.000	50,000	41,171	George L. Walter	J. L. Robertson
Citizens Deposit & Trust Co	125,000	50,000	18,378	S. J. Saint	C. C. Henderson

	Capital	Surplus	Profit	President	Vice-President
Tarentum					
National Bank of Tarentum	$ 50,600	$ 50,000	$ 11,209	Jno.W. Hemphill	L. M. Stephens
Peoples National	50,000	50,000	13,125	Wm. A. Marvin	Geo. H.McFetridge
Tarentum Savings & Trust Co	125,000	25,000	14,840	Alfred Hicks	Jas. M. Esler
Turtle Creek					
First National	50,000		2,860	A. L. Foller	P. W. Boli
Turtle Creek Savings & Trust Co	125,000	25,000	13,714	W. H. Semmons	D. S. Boyd
Wilkinsburg					
First National	50,000	100,000	82,178	P. J. Pierce	A. W. Duff
Central National	100,000	30,000	13,677	C. W. Smith	R. A. Balph
Wilkinsburg Bank	50,000	50,000	11,863	R. L. Finley	G. W. Baldwin
Wilkinsburg R. E. & Trust Co	445,600		61,335	Jacob Weiman	John E. Rigg
Wilkinsburg Trust Co	125,000		6,377	J. R. Wylie	Thos. M. Allen
Wilmerding					
East Pittsburgh National	100,000	50,000	42,880	John F. Miller	P. W. Morgan
Wilmerding National	75,000	10,000	11,761	F A Faller	Thos. S. Patch
Other Banks					
Avalon Bank, Avalon	50,000		6,236	W J. K. Snyder	H. P. McCurdy
Bellevue R.E. S.&Tr. Co.,Bellevue	125,000	32,000	18,265	W. Jenkinson	Geo. M. Paden
Clairton National, Clairton	25,000	2,500	2,693	A. G. Wilson	A. B. Ingenito
Union Trust Co., Clairton	125,000		17,537	A. G. Wilson	H. J. Davis
First National, Crafton	50,000	25,000	2,281	S. W. Wilson	Ed M. Wilson
Crafton Trust Co., Crafton	125,000	1,134	5,202	Homer P. Goff	James A. McAtee
Castle Shannon Sav. & Trust Co	125,000		16,690	O. R. Lake	A. N. Anderson
East Pittsburgh Savings & Trust Co	125,000	25,000	15,458		
First National, Etna	50,000	10,000	3,880	Robert Malone	W. D. Kroesen
Glassport National, Glassport	50,000	10,000	819	S. A. Boyce	James Evans
Hays National, Hays	25,000	1,000	840	Reid Kennedy	J. O. Miller
Springdale National, Springdale	25,000	3,000	2,167	L. A. Burnett	Jos. Heidenkamp
St. Clair Sav. & Tr. Co., Knoxville	125,000	25,000	2,058	E. M. Tucker	F. J. Seely
State Bank of Dravosburg, Dr'v'rg	75,000	20,000	13,304	Stephen S. Crump	Wm. Wilson
Bank of Millvale, Millvale	50,000		29,683	C C. Henderson	Saml. N. Murphy
First National, Natrona	50,000	25,000	7,036	Alfred Hicks	H M. Brackenridge
First National, Oakdale	75,000	25,000	16,694	W. J. Cassidy	L. G. Simpson
First National, Pitcairn	25,000	20,000	3,462	N. Cameron	Edw. Gress
First National, Sheriden	50,000	22,000	1,916	H. E. Clark	J. Murphy
First National, Swissvale	50,000		5,678	Nathaniel Green	J Madison Linn
First National, Verona	50,000	35,000	27,640	R. D. Elwood	H. W. Armstrong
First National, Wilson	25,000	6,250	1,989	J. F. Scott	A. G. Wilson
First National, Oakmont	50,000	6,500		L. M. Morris	D. B. Blackburn

It is, however, only when we compare the banking interests of Pittsburg with those of other cities or with states that we can realize the city's strength in that direction. Pittsburg is the strongest manufacturing center in the world and the money received from its yearly output makes its banking interests greater in most respects than those of any other city in the United States save New York. It is impossible to give statistics for the year 1907, but at the close of 1906, New York banks had an aggregate capital stock of $195,600,000, with a surplus of $402,180,264, and the city of course stands first among all American banking centers. The aggregate capital stock of all Pittsburg banks is $60,585,000, and their surplus was then $94,467,461. In this it leads all cities in the Union save New York. Its comparative standing can best be shown by following figures which are taken from the highest authority for the year of 1906. Philadelphia had a capital stock of $57,185,000 and a surplus of $91,753,000; Chicago had a capital stock of $52,021,000 and a surplus of $45,260,000; Boston had a capital stock of $39,000,000 and a surplus of $48,000,000; San Francisco had a capital stock of $33,930,000 and a surplus of $27,751,000 Baltimore had a capital stock of $20,800,000 and a surplus of $19,232,000;

Cleveland had a capital stock of $19,770,000 and a surplus of $12,081,000. By this the capitalization of the banks of Pittsburg is larger than that of Boston and Cleveland combined and larger than St. Louis and Baltimore combined. In the extensive report from which we quote, it is shown that the aggregate capital stock of the banks of Pittsburg is larger than the combined stock of the banks of Buffalo, Cleveland, Toledo, Cincinnati and Detroit. The combined capital stock and surplus of Pittsburg's banks is $155,025,416, and that is more then the combined capital stock and surplus of all the banks in Maryland, West Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi and Arkansas. The figures given above show that it is $18,000,000 greater than that of Chicago and Baltimore combined. The banking capital strength of the banks of the Pittsburg district is said to be five millions more than the combined capital of the Bank of England, the Imperial Bank of Germany and the Imperial Bank of Russia.

The net earnings of the banks of Pittsburg for 1906 were $11,387,000 which was 20.1 per cent. of the capital stock, and 7.6 per cent. of the capital and surplus, and in this the earning capacity, Pittsburg surpasses New York and all other American cities. Chicago had in 1900 more than five times the population of Pittsburg and yet the average bank earnings each year since then in Chicago is less than 60 per cent. of Pittsburg's earnings. Pittsburg also leads all cities of America in the proportion of its combined capital stock and surplus to its gross deposits. The proportion of Pittsburg is 48 per cent.; St. Louis 34.2 per cent.; Philadelphia 24.8 per cent.; New York 20 per cent. and Chicago 14.5 per cent. There are but eight banks in the large cities of the United States in which the capital stock is rated at more than $1,000 per share; New York has five of these and Pittsburg has three. No other large city has any. Pittsburg's entire bank resources in 1906 were $517,319,375, which gives an average per capita according to the population of 1900, of $1,308, and in this it surpasses all cities in the United States or in America.

The following table was compiled to show the combined strength of all the banks in Allegheny county in 1905 and in 1907 and the increase between those years.

	1905	1907
Total number of banks	177	179
Total capital	$ 67,457,279	$ 72,139,087
Total surplus and profits	103,460,865	106,012,488
Total loans	280,684,556	254,732,101
Total investment securities	142,218,811	151,723,908
Total deposits	360,437,111	409,183,328
Total resources	558,855,772	612,175,489

Taken as a collective institution, the banks of Pittsburg have demeaned themselves in a way that has been highly honorable. There have been failures, but they are incidental to all business enterprises, and in most instances in Pittsburg the creditors realized a large percentage of their deposits and in

many cases were paid in full with interest. But even the failures have been few when compared with those of other cities, or with cities in other states, particularly with those in Ohio. But no comparison of this kind is fairly made unless the amount of money handled is also considered, and when this is done, the failures in Pittsburg have been few indeed. They have, on the other hand, contributed greatly to the city's growth. No one who is familiar with the financial assistance that is almost invariably necessary to found and build up industrial institutions, such as are seen on all sides in Pittsburg, can doubt the liberal policy generally of the banks of Pittsburg. That Pittsburg now stands first among the cities of the world in the product of iron, steel, coal, coke, glass, etc., is due, in a very great measure, to the liberal policy of the banks.

CHAPTER VIII.

The Medical Profession.

At this late day it is perhaps more difficult to write intelligently of the medical profession than of any other subject connected with Pittsburg's early history. For nearly a century and a half physicians have practiced in Pittsburg without leaving any record of their work except such as has been handed down by tradition. Prior to the passage of the Act of 1881 there was no public record, whatever, kept of the city's physicians. From the very nature of their professional services, there is but little publicity given to their work and since the ethics of the profession forbid them from advertising we do not have even the newspaper files to tell us of their residence here. They came to the city, they labored hard and earnestly, they passed away and are generally forgotten, or if remembered it is not infrequently because of something which they did outside of the profession to which they devoted their best energies and talents; yet no profession has advanced as the medical profession has in the last century and a half. The physician of the olden times knew enough to prescribe calomel or quinine, to use the lancet in bleeding the sick man in nearly all cases, and to blister him with mustard when other remedies failed; and if in addition to this information a young man had a pair of saddle bags and knowledge enough of medical terms to impress his patients with his skill in the healing art, he had almost, if not quite, enough to begin practicing as a physician. Nor did the ablest exponents of the profession know much more about the science of health, as it is known today, than he. To illustrate, it was nearly a century after Pittsburg was founded before the most learned scientists of the profession discovered that an anæsthetic could be given to a patient so that a surgical operation could be performed on him without his immediate manifestation of pain. The books of the profession, published even as late as 1844, give explicit directions as to the best way to tie a patient to prevent him from unintentionally injuring himself or hindering the operation of amputating his leg or arm, and but few other operations were performed. The discovery of anæsthetics has enabled the profession to cure many ailments by operations which were impossible before. The discovery of the antiseptic dressing has been almost equally beneficial. Both having aided materially in lengthening the average life of mankind.

In Pittsburg, like all other settlements, the physician came first and after him came the lawyer and clergyman. Until the early settlers began to have property to quarrel over, or to transfer, they could get along without a lawyer and perhaps, from what we know of them, the want of a clergyman was still less distasteful to them. But the ills and pains of the human system were nearly the same a century ago as they are now, and these called for a physician at the earliest possible period. Before his arrival the housewife, who had been taught from her youth up of the curative virtues of herbs and roots, ministered to many an aching brow and doubtless with great success. For many years in Western Pennsylvania she performed a very important part in the health department of household economy and this knowledge was necessary when the nearest physician was perhaps almost a day's journey from her log cabin in the wilderness. For many diseases of children and perhaps for diseases in grown persons in their incipient stages, the teas the anxious mother brewed from herbs and roots were doubtless efficient, or at all events of great value.

The first physician in Pittsburg was Dr. Nathaniel Bedford who began practicing here in 1770. The physician of that day did not have an office but a "shop" and the young man learning the healing art under his instruction was not called a student but an "apprentice," and his distinction was more appropriate than one might think, without reflection. There were then, of course, no drug stores in the community and the physician did not think of writing prescriptions but furnished all the medicines which, in his opinion, his patient's malady demanded. The *Gazette,* of August 26, 1786, says: "There were here, in Pittsburg, in 1785, two physicians, Dr. Bedford was one of them." The name of the other physician is not given but it is generally supposed that it was Dr. Thomas Parker. Dr. Bedford was an Englishman who came to Fort Pitt about 1770 as a surgeon of the British army. When he was in Pittsburg a short time he became impressed with the place, or perhaps with its prospects as a town, and, resigning his position as surgeon of the garrison, opened a shop for the treatment of the pioneers in and around Pittsburg. It is said that he had been well educated in England and that he was a man of highly polished manners and of a most exquisite taste in his dress, wearing ruffled shirtfronts and wristbands all the time, after the fashion of the best dressed men in London society. He was probably successful in his work, for the record titles of lands on the South Side show that he owned nearly all of the territory now comprising the twenty-seventh, twenty-eighth and twenty-ninth wards of the city, that is, what constituted the old boroughs of Birmingham and St. Clair. It is likely that he retired from the practice of medicine and looked after his estate for in a directory of 1815, he is represented as a citizen of Birmingham, and the word "gentleman," which followed his name, would indicate that he had no special calling. He was a prominent Free Mason and a bachelor, and at his death the fraternity erected a monument to his memory. Though storm beaten and weather stained this monument could be seen until recently, near the track of the South Twelfth Street Inclined railway. The monument was of the shape

of an antique urn and for more than three-fourths of a century it served to point out the last resting place of the first man who came to minister to the sick of Pittsburg.

Dr. Bedford's shop was the favorite one in Pittsburg for young men to enter who desired to become physicians. It is probable that he being free from family cares, enjoyed the company of young men and took a delight in instructing them. At all events, many of the earlier physicians of the city read with him, and many of them became eminent in their day. These apprentices led a different kind of life from that which the medical student of our age leads. They were almost universally indentured to remain with the physician for a term of years. They began by attending to the horses, by gathering herbs, roots, etc., and by boiling them, to extract the juice, or by pounding them and other drugs in an iron mortar. The apprentice soon learned to mix medicines, make plasters, to deliver drugs to patients residing a long distance from the shop. They often accompanied the doctor at night and in a short time could report the condition of the patient of the physician. Drawing teeth was then a physician's duty and the young man soon picked that up, for it was then supposed to be mostly a matter of strength, not of skill. He could also assist in surgical operations when, in the absence of a knowledge of anesthetics, holding the patient was a very important function to be performed. Bleeding for nearly every disease was so simple an operation that the apprentice soon learned it. After working a year or so in that way he was thought fit to attend a course of lectures in a medical school, the leading ones being in Philadelphia and Baltimore. This long journey was made on horseback. Generally he began to practice after one winter's course in the medical school, for there was no law in Pennsylvania to forbid it until 1881. Frequently he practiced continuously after that without further instruction in a medical school. Otherwise he attended a second winter in the East and was then, in truth, a full fledged physician, for most schools in that day had but two years in their regular course. Some of the physicians educated in that way became eminent in their day.

In the early days of Pittsburg there were no pavements, and with the heavy wagoning the universal testimony is that the streets were almost impassable in the winter and spring months. Buggies and carriages were not in use and indeed could not have been used generally because of the bad roads. The first wheeled vehicle used by physicians, and by but few others, was a two-wheeled carriage called a gig. He always carried a pair of saddle bags in which were small quantities of medicines in daily use. At night he invariably carried a lantern, whether on foot, or on horseback, or in his gig. His practice was not confined to Pittsburg. Not infrequently was the early physician called to ride many miles into the country, making part of the journey on paths that led through the woods, so that the trip to the country meant much more then than a similar one would now, though it were made in the same way. The life of a physician in those days was, at best, an extremely laborious one. The celebrated traveler, Mungo Park, was in early life a country physician in

Scotland, and afterwards spent several years in exploring and surveying in the wilds of Africa. He wrote, that he was decidedly of the opinion that of the two, the latter was preferable. Yet the early physician performed his hard work willingly, and it was only through arduous duties and privations of this kind, on the part of all the pioneers, that our present advancement and civilization were brought about. All honor is due the early physician and our only regret is that we cannot be more definite in referring to him.

Peter Mowry was born in 1760 and entered Dr. Bedford's shop in 1786 as an apprentice. His business was to sweep the shop, make pills, and as he acquired a knowledge of the science of medicine, to go with the doctor on his visits, carrying the saddlebags and to learn from experience and association, what he could of his patron's art. There were but few books in the country medical shops at that time. Mowry, however, later attended one or two terms of medical lectures in the University of Pennsylvania, which was then in its infancy. These lectures were doubtless very profitable to the young physician for they were delivered by the leading instructors in the United States, namely, by such men as Shippen, Wister and Benjamin Rush, men who have not been surpassed in intellect, all things being considered, since their day. On his return from Philadelphia Dr. Mowry married a daughter of Judge Addison and entered into partnership with Dr. Bedford. In the early part of the nineteenth century he had become one of the first physicians of Pittsburg. His residence was on the east side of Diamond Square.

William Addison, a son of Judge Addison, read medicine with Dr. Peter Mowry, his brother-in-law. He was graduated at the Maryland University and afterward spent two years in Paris pursuing his studies there, after which he formed a partnership with Dr. Mowry in Pittsburg. He was one of the best educated physicians in the city in his day but, we think, did not attain as high a rank among Pittsburg physicians as Dr. Mowry. Contemporaneous with Dr. Bedford, Mowry and Addison were: Doctors Carmichael, Mawhinney, Holmes and George Stevenson. The latter was a Revolutionary soldier, who was born at York in 1759. He left school in Carlisle when the Revolution came and, like many other students, joined the army and served at least till the spring of 1778. By the close of the war he was a surgeon in the army so that he must have studied medicine in the meantime, after which he re-enlisted. He then practiced in Carlisle until 1794, when he came to Pittsburg at the head of the Carlisle Infantry as a part of the army raised to put down the Whiskey Insurrection. Like many others, he was pleased with this section and concluded to move his family here and engage in the practice. He remained here about thirty years and was one of Pittsburg's strongest citizens, becoming noted, not only in his profession but as one who took great interest in the general welfare of the community. Retiring from work, in 1825, he removed to Wilmington, Delaware, where he died in 1829. He had two sons who were physicians of note. One of them practiced in Carlisle and the other was a surgeon in the United States army.

In 1826, when Pittsburg had been ten years a city and had a population of perhaps over ten thousand, the city directory gave the following list of practicing physicians in Pittsburg, namely: Doctors Brunot, Mowry, Holmes, Church, Agnew, Gazzam, Simpson, W. F. and I. S. Irwin, Burrell, Armstrong, McConnell, Spear, Denny, Hannen and McFarland. Dr. Holmes was known not only as a physician but as a rider of fast horses. He took great pride in fine horses and sat on the animal with a superb dignity that was seldom seen in the streets of Pittsburg, even in that day when horseback riding was the chief mode of moving about, and when physicians went about almost entirely in that way. He was a good judge of horses and took great pride in training them and handling them. He was fond of saying that his horse knew more of medicine than some pretending physicians. He had studied medicine with Dr. Mowry and stood very high among the physicians of his day.

Dr. James Agnew came to Pittsburg from Philadelphia in 1815. He had been thoroughly educated in the East and attained eminence in his profession. His son, Daniel Agnew, read law and is well remembered now as the late chief justice of Pennsylvania. Dr. Agnew was in partnership with Dr. Simpson, and in the city directory for 1819 the following advertisement appears: "Doctors Agnew and Simpson have formed a co-partnership in the practice of medicine, and jointly tender their services to their friends and all others who may apply for professional aid. Their shop is at the corner of Third and Wood streets, where one or both may at all times be consulted." This style of an advertisement by the strict rules which govern the profession of the present day would bring great discredit on the physician who would permit or publish it and the reputable members of the profession would not associate with him in a professional capacity. Yet Agnew and Simpson were men of high standing in their day. Dr. Agnew remained in practice in Pittsburg till his death.

There was a practice then which was prevalent throughout the country that a physician should attend the funeral of his patient and he usually walked at the head of the procession from the house of the deceased to the cemetery, or graveyard as it was called. Since cemeteries were at that time very close to the town of Pittsburg, being usually near the churches, there were no horses or carriages used at funerals. The pall bearers carried the corpse on a bier on their shoulders. The physician and the clergymen walked in front while the family and friends followed behind. The physician did not feel discredited by being thus made prominent in the procession for there was a prevalent impression then that death was but a manifestation of Divine will, and was not, in any way, indicative of the inefficiency of those who ministered to the patient. On one occasion, however, a celebrated physician of Pittsburg was marching at the head of a funeral procession when he met William Price, who was not so considerate. Price was an eccentric Englishman, and the owner of a foundry on Fifth avenue, in which he made small castings, most of which he delivered in person to his customers. On meeting the funeral procession Price called out

saying: "Well, Doctor, I see that you, like myself, are delivering your own work."

Two prominent physicians in the early half of the last century were Drs. Joseph P. and Edward D. Gazzam. The latter was first mentioned in this work as welcoming Lafayette, when he visited Pittsburg in 1826, and is mentioned many times after that. He was born on May 4, 1803 and was graduated from the Western University in the class of 1824. He read law with Richard Biddle and was admitted to the bar in August, 1826. After practicing a few years in the office of his preceptor his health failed and that he might have more out door work he read medicine with his older brother Joseph, who was quite eminent among Pittsburg physicians. In due time he was graduated from the University of Pennsylvania and began the practice of medicine in Pittsburg prior to 1832, though the exact year is not known. He did not attain a high standing in medicine, though he was all his life prominent in the upbuilding and welfare of the city and is therefore frequently referred to in its annals. Dr. Gazzam was a very eloquent man in any public assemblage as the reader of these pages must have noticed. In 1841 he ran for state senator against George Darsie, in the district then composed of Allegheny and Butler counties. Allegheny county gave Gazzam a majority of forty-six votes, while Butler county gave Darsie a majority of forty-seven votes, defeating Gazzam by one vote. Being one of the early anti-slavery men of the city he was sent as a delegate to the Free Soil convention, in Buffalo, in 1848. In the same year he was the candidate of the Free Soil party for the governorship of Pennsylvania. He ran on the same ticket for the office of state senator in 1853 but was defeated. He became a Republican on the formation of the party and as such was a candidate for the same office in 1856. He made the contest against Judge Hopewell Hepburn and his success made him the first Republican senator elected from Allegheny county.

He controlled a large estate through marriage and perhaps did not need to put forth the efforts necessary to attain a high standing in his profession. Though he has always been classed among the physicians of the county he was better known as a public man, or a man of general affairs, than in his profession. He and his brother were born in Philadelphia, though of English parents who settled in Pittsburg in 1800. The brother was born in 1797 and was graduated from the University of Pennsylvania in 1817. He achieved great success in the profession and sustained his standing even until his death on May 29, 1863. Yet we know but little of him, while his brother, because of matters entirely outside of the profession, is one of the best remembered men of his day. But even if Edward D. Gazzam was not a great physician he deserves well to be remembered by the people of Pittsburg. Financially independent, there was no reason why he should interest himself in the city's welfare, except from an honest desire to perform his part as a citizen. His strong advocacy of the unpopular cause of the black man for years brought him but little else than contumely, and in this he could scarcely have been actuated by

any other cause than principle. He did not seek a second term in the state senate but remained an active citizen of Pittsburg during the Civil war, taking great interest in the measures gotten up to assist the North in the great contest. In 1867 he removed to Philadelphia where he died in 1878.

Dr. McDowell was a graduate from an eastern university and began to practice there. Having acquired through his wife an interest in an iron works in Pittsburg he came here to look after it and for a time devoted his energies entirely to iron making. Later he returned to his profession and opened an office or shop in Pittsburg and became a leading physician of the place. Doctors Irwin, Burrell, Armstrong and Hannen were all eminent in their day, each achieving a marked degree of success in their profession. Dr. Spear was for a long time in the general practice but afterwards devoted himself to the diseases of the eye and in this specialty attained great eminence. Dr. Denny retired from the profession after several years of active and successful work and devoted his time to finances, he being connected with several banking institutions of Pittsburg. The name of Dr. H. D. Sellers is not mentioned in the list of doctors in 1826 and it is probable that he did not reach Pittsburg for a short time after that. He was graduated at Baltimore and came to Pittsburg shortly after his graduation. He earned and enjoyed a high reputation as a physician. Dr. George Dawson came to the city about the same time, for he had as an apprentice the elder Gazzam who began practicing in 1817. Other physicians, in Pittsburg, in 1815, were Peter Mowry, William Simpson, Joseph P. Gazzam, Felix Brunot, S. R. Holmes, C. L. Armstrong, W. F. Irwin, J. H. Irwin, William Church, William Addison, L. Callahan, Henry Hannen, H. D. Sellers, John T. Stone, Thomas Miller, David Reynolds and James R. Speer. To the last mentioned we are indebted for the above names, since late in life he made a memorandum of those who were practicing when he began. In 1832, there were added to the list, according to the same authority, the names of Jeremiah Brooks, T. F. Dale, Edward D. Gazzam, Adam Hays, Ebenezer Henderson, William Hughey, Jonas R. McClintock, A. N. McDowell, John Roseburg, J. H. Smith, William Woods and Robert Wray.

Dr. Felix Brunot came to America from France. As his name indicates, the family was of Huguenot descent. He was educated as a physician before coming here, for he came as a physician on the staff of Marquis de Lafayette when he came to America to assist the colonies in their contest against Great Britain. It is probable that he remained in the army until the close of the war. After that he settled in Philadelphia, where he practiced medicine till 1797, when he came west and purchased the well known island in the Ohio river immediately below Pittsburg, which is still known by his name. He practiced many years after coming here, and was a physician of high standing. He was the grandfather of the late Felix R. Brunot, who was so highly revered by the last two generations of Pittsburg people. Dr. Brunot died May 23, 1838, at the advanced age of eighty-six years.

Dr. James R. Speer, whose memorandum we have quoted, was a remarkable man. He resided and practiced in Pittsburg from 1825 till his death in 1891. He was born in Chambersburg in 1796 (November 19), and had had considerable practice before locating in Pittsburg. For the first few years he practiced generally, but gradually became known as a surgeon. He was noted in this direction, particularly for operations performed on the eye. It is said that he had performed over 600 cataract operations in his time. Aside from his learning as a physician and skill as a surgeon, he was an active man in the business interests of the city, and took a prominent place in its social life. He died September 7, 1891, when he was but a few weeks less than ninety-five years old.

Dr. Jonas R. McClintock was in his day a very popular, a very polished, and very successful physician. He was born January 9, 1808. He served as mayor of Pittsburg, but after one term resumed his practice, if he had ever abandoned it, and continued in the work till his death on November 27, 1879. A noted physician of about the same period or perhaps a little later, was Dr. William C. Reiter, who was born in Pittsburg, March 24, 1817. For some reason he went to Greensburg and studied with Dr. James Postlethwaite, and was graduated from Jefferson Medical College in 1839. He began practicing in Mount Pleasant, and remained there till 1856, when he located in Pittsburg. He was a physician of fine mind and original ideas. He wrote a pamphlet on diphtheria when the disease was not so well understood as it is now, and it was highly appreciated by the profession. He was a man of close application, a close observer, and one who was gifted with a high power of entertaining in conversation. He died in Pittsburg November 28, 1882. Of a slightly later period was Dr. Joseph A. Reed, who came from Washington, Pennsylvania. He was born there December 31, 1823, and was graduated from Washington College in 1842. In 1847 he was graduated from Jefferson Medical College, and at once began practicing in Allegheny City. Ten years later Dixmont was established as a separate institution, the insane having before that been treated in a department of the Western Pennsylvania Hospital. Dr. Reed had shown an interest in the treatment of insane patients, and was placed in charge of the new institution. To the interests of these unfortunate patients he faithfully devoted the rest of his life, about twenty-seven years. He became recognized throughout the Union as an authority on insanity, and was consulted by both the national and state authorities concerning the legislation necessary to properly look after them and improve their condition. In the meantime he contributed much valuable material to the literature on insanity, most of which is yet regarded as standard authority on the subject. He died November 6, 1884.

A very remarkable man among Pittsburg physicians, whose life not only included a great deal of romance, but perhaps an equal measure of success, was Dr. Albert G. Walter. Born at Augsburg, in Prussia, in 1811, he was left an orphan in childhood, but with considerable estate which was placed in the hands of guardians. After the manner of managing matters in that day, the guardians arranged that the boy should become a clergyman. His own inclina-

tions prompted him to become a physician. The guardians tried to force him by withholding the necessary expense money, but to no avail, for he was determined to be a physician. This determination resulted in his graduation from the medical department of the University of Berlin. He had also formed the purpose of locating in America. The ship on which he took passage was wrecked off the coast of Sweden, and this cost him all his possessions. Making his way to London he in some way won the attention and friendship of the noted Sir Astley Cooper, who started him in life in the city, and perhaps later sent him to America. He came at once to Pittsburg, reaching the city in 1837, with no possessions whatever. He gave his time largely to surgery, and being of a bold experimentive nature, soon attracted considerable attention by performing some very important operations. The profession was farther advanced in Europe at that time than in America, and it is probable that he came here better equipped than the average American student. He wrote well, and for nearly forty years was a leader in the profession in Western Pennsylvania. In 1867 he published "Conservative Surgery," and in many smaller publications he enriched the literature of his profession. In all his work he was independent of precedent, and delighted in adopting new and original methods of operation. Of one of these operations the *Pittsburg Medical Review* for March, 1887, has the following notice:

"At the February meeting of the Allegheny County Medical Society, the committee on intelligence reported Sir William MacCormac's two cases of successful abdominal section for rupture of the bladder, and commented on the novelty of the operation. Within a stone's throw of the building in which the society met, stands the house of the late Dr. Albert G. Walter, who, twenty-five years ago, opened the abdomen of a man with a ruptured bladder, with success, and reported the case in the *Medical and Surgical Reporter* of that year, 1862. In the *Journal of the American Medical Association,* February 26, Dr. T. S. K. Morton speaks of Dr. Walter as the pioneer in this work, and the London correspondent of the *Medical Record,* February 5, gives to Dr. Walter the credit due him. A prophet is not without honor, save in his own country." Much material of this nature could be added to show that he was really a great surgeon and far in advance of the profession of his day. Earlier in life he had founded the Pittsburg Humane Society, and gave it great attention and support for many years. He died of pneumonia on October 14, 1876.

The name of Dixon is a noted one among the physicians of the past in Pittsburg. There were four members of the family, any one of whom achieved sufficient reputation in his profession to entitle him to a place in its history. The first of the name was Dr. John Dixon, who was born in Maryland, May 24, 1812, and was educated in the University of New York, from which he was graduated in 1830. He became quite noted, and when the Civil war came offered his services to the government when it was necessary to temporarily increase the force. He remained in active practice until his death on January

9, 1888, when he was in his fifty-eighth year as a physician. A brother younger than he but full of promise in the profession, was a surgeon in the Civil war with the Army of the Potomac. In the celebrated Peninsular campaign of 1862, he contracted a malaria which forced him to relinquish his work. He came to Pittsburg but died a short time after his return. Drs. John S. and Joseph N. Dixon were sons of Dr. John Dixon, and both sustained the high standing of their father though neither of them reached his number of years. John was born in 1844, and was graduated from the Jefferson Medical College in 1868, after which he pursued his studies two years in Europe. He became a surgeon and physician of note in Pittsburg, but died of pneumonia September 14, 1892. Joseph was born in 1848, and was graduated from Jefferson Medical College in 1869. Like his brother he spent two years abroad, most of the time being a student of the medical schools of London and Paris. He was said to greatly resemble his father, whose skill in surgery and ability generally, the son had in a great measure inherited.

A nephew of Peter Mowry, who read medicine with him, survived until a few years ago. This was Dr. Robert B. Mowry, who was born in Pittsburg December 23, 1813. After his time was spent under the pupilage of his uncle he entered Jefferson Medical College and received his diploma from it in 1836. He at once located in Pittsburg and continued in almost uninterrupted practice for fifty-nine years. He became noted in the profession and there are several physicians in the city who read with him, and who are then the fourth generation in an unbroken line of physicians beginning with Dr. Nathaniel Bedford in 1770. Dr. Robert B. Mowry may properly be called the father of the Allegheny General Hospital, for the founding of this most worthy institution was due to his efforts much more than to the efforts of any other. He was a man of high character and was no less distinguished as a citizen than as a physician. In 1876 he was elected president of the State Medical Association, an honor which his high standing in the profession amply warranted. Full of years and professional honors, he died March 14, 1895.

One of the most noted physicians of Pittsburg's more modern days was Dr. James McCann. The eminence he attained in the comparatively few years of his life was not confined to the limits of Pittsburg. He was born near Pittsburg in 1836 and was graduated from the University of Pennsylvania in 1864. His rise in the profession was very rapid, due in part at least to his energy and progressive spirit. He bent the best energies of his life in founding and establishing on a firm basis, the Western Pennsylvania Medical College, which has been considered under the head of the University of Western Pennsylvania, of which it is now a very important part. He was widely known as an author in the profession, as a teacher in the school he helped to found, and as a practitioner his reputation was quite national. Many who were quite competent to judge, thought him one of the ablest surgeons in the United States. He had been engaged as a surgeon in the Civil war and gave his attention more particularly to that branch of the profession ever afterwards.

Soon after he passed the fiftieth milestone in life his health failed, and though he could cure others he could not cure himself. Though in bad health he continued his work almost until his death, which occurred June 13, 1893. Associated with Dr. McCann in name and in the higher branches of their work generally was Dr. James B. Murdock. He was born in Scotland in 1830, though he was brought up in America and was graduated from the College of Physicians and Surgeons in New York in 1854. He was noted as a physician though, like that of Dr. McCann, his fame rests chiefly on his work as a surgeon. He had been a surgeon in the Civil war and this perhaps induced him to devote his life more particularly to that branch of the profession. In 1889 he was elected president of the State Medical Society. He contributed frequently to the literature of the profession, two of his most noted papers being "Amputation at the Hip-Joint" and "Torsion of the Arteries." He was deeply interested in the founding and building up of the Western Pennsylvania Medical College. At his death, which occured on October 29, 1896, he was dean of its faculty.

In 1837 Dr. Gustavus Reichhelm introduced Homeopathy in Pittsburg and succeeded in establishing himself and his theories, though both met with severe opposition for many years. He was a physician who would have made any school he followed respectable and a number who came after him were equally great. Homeopathy has now a firm foothold in Pittsburg and there is little doubt but the credit is largely due to such men as Dake, Cotë, Boyer, Wilson, Rosseau, Hoffmann, W. R. Childs, Herron, etc. Dr. Reichhelm came to America from Europe in 1831. He was a man of fine bearing, fine education and made his school popular in Pittsburg. In 1853 he removed to Philadelphia where he remained till his death in 1864.

Dr. D. M. Dake was born in 1814 and became a physician of the allopathic school, being graduated from the University of Vermont in 1835. After practicing ten years he abandoned that school and studied Homeopathy, and became one of the chief physicians in founding the American Institute of Homeopathic Medicine. In 1847 he settled in Pittsburg, induced to do so perhaps by his brother-in-law, J. Heron Foster, then a prominent business man and newspaper man of the city. He and Dr. Reichhelm were in partnership and added great strength to the then new theory. He had two brothers, C. M. and J. P. Dake, both of whom were homeopathists and strong men who were brought here by him. Dr. J. P. Dake went from Pittsburg to assume the duties of the professorship of materia medica in Hahnemann College at Philadelphia. This position was offered to his brother, but was declined. Dr. D. M. Dake was a strong exponent of his theory on the lecture platform and wrote a great deal for the journals of his day. He delivered a lecture on Mechanical Aids in Medication that gave him quite a name and that introduced new ideas that are now followed generally by the profession. All three of these brothers were in Pittsburg. He abandoned active work in Pittsburg in 1864 and after that resided in Brooklyn, in San Francisco and in Florida,

spending the winter months of each year in the latter state. He died on March 17, 1891. Dr. J. P. Dake was born in New York state in 1824, and was graduated from the Union Medical College in 1849, and from the Hahnemann Medical College in Philadelphia in 1851. He read medicine and practiced with Dr. Reichhelm and early in life achieved a reputation as a homeopathist that was not confined to the United States. He too was an instructor in Hahnemann College, and will long be remembered because of his teachings and writings and because of the interest he took in medical associations. He removed to Nashville in 1869 and died there in 1894.

Perhaps the ablest, and certainly one of the most kindly remembered physicians of the homeopathic school was Dr. Marcellin Cotë. He was born in Cacouna, Lower Canada, in 1815. He was graduated from the College of Nicolet at Three Rivers in 1836. After teaching and reading medicine two years he came to the United States and entered Bowdoin College, Maine, from which he received the degree of M. D. in 1844. He began practicing at once in New York City and in the next three years adopted Homeopathy, prepared himself for its practice and removed to Pittsburg in 1847. He was a man of great energy, high character and of a deep-seated kindness of heart which won for him the respect and friendship of both old and young. For thirty-one years he practiced in Pittsburg and for the last thirteen years of his life was the oldest of his school in the city. During these years he worked not only as a physician, but to upbuild and make popular the school to which he belonged. He was the chief founder of the Homeopathic Hospital and Dispensary of Pittsburg, and was one of the founders of the Homeopathic Medical Society, of Pennsylvania, serving as its president in 1871. In 1874 and 1875 he was president of the Homeopathic Medical Society of Allegheny county. He was also a member of the American Institute of Homeopathy, a charter member and twice president, 1877-1878, of the Homeopathic Anatomical Society. To encourage and foster these institutions required a great deal of time, energy and attention, but he gave it uncomplainingly, and even in his last years, worked with the enthusiasm of youth, that his favorite system of medicine might continue to grow and to benefit mankind. Nor was he less alive to the amenities and pleasures of social life; in that sphere as in his profession, he was a leader, whose highest purpose seemed to be to contribute to the true comfort and happiness of those with whom he came in contact. For the benefit of the profession he translated extensively from the French and two of his works in this direction, "Crozario on Midwifery" and "Rapon on Typhoid Fever," are well known to the profession, even outside of his school. Though deeply afflicted in his latter months, the habits acquired in a life of industry were not laid aside, even until the day of his death. He died May 29, 1878. The colleges from which the physicians named were graduated indicate generally the schools to which they adhered in their practice.

In 1850 the Allegheny County Medical Society was organized and was kept up for some six years when it suspended meetings, but was re-organized

in 1865, since which time it has kept up an active society. Under its influence the physicians of Pittsburg have kept abreast of the times in the medical and surgical art notwithstanding the rapid strides the profession has made in the last fifty years. To the physicians of Pittsburg is due the establishment of the Western Pennsylvania Medical College, which has grown so important that a special mention of it is being published elsewhere.

It is scarcely possible for us to mention more than one in a hundred of the really great physicians who have practiced in these cities in the past century. The ones to whom we have briefly referred above are not given as necessarily including even the ablest men in the profession in Pittsburg, but were rather selected as those who were fairly representative men of the age in which they lived. If the ablest physicians of the early half of last century were living to-day, they could not practice intelligently on the information they acquired in their day. This is no reflection on them, for they were great men in their time, but it serves to illustrate the great strides the healing art has made in the past century. This advancement is still going on and we doubt not there are men now living in Pittsburg who are more competent to conquer disease than the ablest men whom we have mentioned above. Physicians and surgeons as a rule, are broad-minded and charitable. But few reputable members of the profession will withhold their best efforts and highest skill, from an honest sufferer because of his inability to recompense them for their services. Perhaps their good work has been shown more in founding hospitals than in any other direction, and it does not cease when the hospital is established, for in them are hundreds of charity patients, who are treated as such by the members of this profession. In almost every other walk in life if a man makes an important discovery, he guards it with zealous care, so that for a time at least, he alone may reap its benefits; but if the physician, even after years of experiment, discovers a new remedy, or a new mode of operating by which the sufferings of the human family may be alleviated, he is content only when he demonstrates it to the world that all mankind may be equally benefited by his work. This altruistic spirit has, in a great measure, brought about the many advancements made in the profession.

CHAPTER IX.

The History of Dentistry in Pittsburg.

The main part of this paper was furnished the writer by H. Edmund Friesell, D. D. S.

While historical research discovers records of the performance of operations upon the teeth during the earlier Egyptian and Greek periods, and the writings of prominent physicians prior to the sixteenth century indicate that there were included with the practice of general medicine many operations that are now acknowledged as solely in the province of the dentist, dentistry as we know it now can hardly be said to have existed prior to the early years of the nineteenth century.

Many of the ancient works on medicine contain references to dental operations; but "Zeen Artznei," the first book devoted solely to dentistry, was published in 1530, by a German writer of Frankfort-on-Main.

In 1840 the first dental college was organized, the Baltimore College of Dental Surgery and a year before that the *American Journal of Dental Science* was published, which was the first journal devoted to it. The New York Society of Dental Surgeons, organized in 1837, and the American Society of Dental Surgeons, in 1840, were the first of their kind in the United States.

In 1841, a class of two in dentistry was graduated from the Baltimore school and upon Robert Arthur and R. C. Mackall the degree of Doctor of Dental Surgery was first conferred. At that time, anyone could enter upon the practice of dentistry, the sole requirements being an abundance of self-confidence and a few suitable instruments.

As an appreciation of the value of the teeth grows in a community, the demand for dental operations increases; and it is not long until we find those practitioners who discover a particular fitness for this class of work taking it up as a specialty, and Dental Surgery results. This has been the history of dentistry in all countries, and that of Western Pennsylvania has been no exception. However, dental disease is often overlooked or disregarded by the general practitioner, on account of the claims of diseases more serious or fatal.

As so much mechanical ability and detail were the prime requisites to first success in dental operations, and as the influence of diseases of the teeth was not appreciated by either the physician or the patient, the profession of medicine has held itself rather aloof from dentistry, and looked upon the dentist as a "puller of teeth and a carver of sea-horse bone." But with the increasing knowledge of the value of the teeth, the demand for a higher grade of intelligence and ability in the dentistry and a more general knowledge of the physiology, anatomy and pathology of the body, we find dentistry accorded a higher place as a specialty of the healing art.

It was common in the early history of all communities to find the physician fully supplied with dental instruments and that a part of his daily work was "pulling teeth." It is said also that the history of Western Pennsylvania records at least one cobbler who rounded out his accomplishments by filling the teeth of any who desired such services. Contemporary with the foregoing class, came the itinerant dentist, who went from town to town, thereby accommodating the dental sufferers who would otherwise be without relief.

The following is an excerpt from a letter written in 1855, which will give some idea of dentistry in the community at the period of 1830.

Some twenty-two years ago (1833), I vegetated in what was then called by many the far west, but now, owing to the railroads, only some twenty-four hours distant from Philadelphia, viz: The western end of the state of Pennsylvania.

A neighboring farmer was blest with eight sons, and having some ambitious views, determined to make one of them (the brightest boy as he thought) a dentist. The lad who had entertained similar notions, was accordingly apprenticed to a practicing dentist, in an adjoining city, for the term of three months. He soon became thoroughly initiated into the art and mystery of carving sea-horse teeth.

After learning all his tutor knew, he sallied forth with the sea-horse tusk, some files and silk twine. But he combined amusement with business, for he added to his stock of instruments a good rifle, with bullet-pouch and powder horn, and was thus enabled to knock over any luckless squirrel that chanced to come in his way, as he journeyed through the woods from house to house in search of employment. Thus was he prepared to practice dentistry, and practice he did, calling at each house, making himself perfectly at home, and doing all the dentistry that was needed. He was a jovial, good fellow, a perfect ladies' man, because of his good looks, but more especially because of the respectability of his profession.

Pittsburg was in no worse straits for dental treatment than most other places, as we shall see.

The first dentist to practice in America is said to have been Isaac Greenwood, who practiced in Boston in 1750. Woofendale, who came from England in 1766 and returned in 1786, practiced in New York and Philadelphia during that period. The next of whom we have any record was Joseph

Lemaire, a Frenchman, who came over in 1762 and practiced in New York until 1784, when he removed to Philadelphia, where he found a dentist by the name of Baker, who had been practicing for a short time. The next native dentist to practice in America was Josiah Flagg, who took up practice in 1782, under Lemaire. In 1800, there were only about ten dentists in the United States; in 1820, there were about one hundred, and in 1830, about three hundred.

The first directory of the "Borough of Pittsburg," compiled by James M. Riddle in 1815, records "waggon-makers, a chymist, taylors and plaisterers," but no dentist.

The first dentist in Pittsburg, of whom we find any record, was an itinerant practitioner named A. S. Van Pelt. He came from Philadelphia, and spent part of the month of June, 1822. He stopped at Daily's Hotel, and offered his services to the "inhabitants of this place," with the following recommendation:

"Mr. Van Pelt will produce certificates of his character and qualifications as a dentist from the following gentlemen:

Philip S. Phisick, M. D., professor of anatomy, University of Pennsylvania.

James M. Staughton, M. D., professor of chemistry and geology in Columbia College."

The first resident dentist of whom we have any record was A. G. Holmes, who in 1826 was practicing in an office on the "Southside of Second street between Wood and Market." About 1827, George A. Hetich announced himself as a resident dental surgeon.

About this period, or probably as early as 1825, Dr. Ebenezer Merritt located on Smithfield street, between Second and Third. Dr. Merritt was born in Redding, Connecticut, January 13, 1795. He received perhaps a meager education, and was graduated at the Castleton Medical College in Vermont, about the year 1820. Not liking the practice of medicine, he went to Philadelphia and studied dentistry with a French dentist, whose name is unknown, and entered upon practice. After itinerating for a time, he located in Pittsburg, about the year 1825, and in 1828 commenced the manufacture of mineral (porcelain) teeth.

In 1829, Dr. Granville Merritt (brother of Dr. Charles Merritt, of New York City), who was born in Redding, Connecticut, July 19, 1809, came to Pittsburg and commenced the study of dentistry with his uncle, Dr. E. Merritt, at the same time acting as assistant in the manufacture of porcelain teeth. The uncle and nephew succeeded in making some very creditable teeth, but upon the death of Granville Merritt, in March, 1835, at the early age of twenty-six, Dr. E. Merritt abandoned the business.

Dr. Merritt exercised a marked influence in his day, and gave to the world an implement new in dentistry, which has changed the whole course

of dental practice, namely—the dental mallet, the introduction of which revolutionized old methods, and marked a distinct era in dental history. The original mallet had a head of silver, filled with lead, and an ivory handle. Dr. Merritt used it probably as early in 1828, and Dr. Charles Merritt, when visiting his uncle in 1830, found him filling teeth with soft gold foil, employing the mallet only in condensing the surface. Co-hesive gold was at that time considered worthless for filling purposes.

After enjoying a large and lucrative practice in Pittsburg for twenty-seven years, in 1852 Dr. Merritt removed to Cleveland and engaged in the coal business. He died in the latter city, September 5, 1864, aged sixty-nine years.

Dr. William A. Ward was located, in 1835, in Fourth street, and had been in practice a short while prior. He commenced using the "atmospheric pressure principle" in 1835. In 1841, he published the following interesting and somewhat pungent announcement

"Wm. A. Ward, Dentist, Fourth Street, between Wood and Smithfield, in the house formerly occupied by Wm. Graham, Esq. Hours of business from 9 o'clock A. M. until 5 P. M., after which hour he will attend to no one, except in cases of actual necessity. He would further inform those who may think proper to employ him, that he expects immediate payment, without the necessity on his part of sending bills."

Burned out by the great fire in 1845, Dr. Ward removed to 278 Penn street, where he practiced until some time after 1856. Dr. E. Hale, Dr. David Hunt and Benjamin Norris were also in practice in 1835. Dr. William M. Wright appears to have been the leading dentist of this period (1835). His office was at 71 Fourth street, one door from Wood. He was a student of the sciences, and made the first daguerreotype ever produced in Pittsburg. In January, 1848, and thereafter, Dr. Wright administered chloroform for the extraction of teeth, and was the first to use an anaesthetic in Allegheny county. This was scarcely four years after Dr. Horace Wells, also a dentist, gave the great boon of anaesthesia to the world. Dr. Wright was a delegate from the Pittsburg Dental Society to, and one of the organizers of, the American Dental Association, at Niagara Falls, in 1859. In 1860, he removed to London, England, to engage in the practice of his profession.

G. W. Biddle began practice about 1835, on Liberty street, in partnership with McBride. He afterwards removed to Smithfield street. Mr. Biddle is credited with being the inventor of the bayonet-shaped forceps.

In 1837 we find Geo. P. Schively, dentist, 72 Liberty street, and Wm. Bryan, dentist, 22 Liberty street, near St. Clair. Mr. Bryan also performed cupping and leeching.

Other dentists practicing in 1837 were: A. Blake, Penn and Pitt; Wm. N. Crumpton, 181 Penn; J. B. O'Conway, 4th street, between Market and Ferry.

In 1841 we find added to this list of names that of Geo. B. Fundenburgh, surgeon dentist, St. Clair, near Penn, who practiced dentistry for a short while,

and then adopted medicine as his calling and became eminent in the latter. In 1846 Hugh Arters practiced at 118 Liberty street, near St. Clair.

Dr. James S. King, sometime prior to 1847, opened an office at 47 Smithfield street. In 1848 he was graduated from the Ohio College, Cincinnati, and was the first Pittsburg dentist to receive the degree of D. D. S. Dr. King has always been one of the leading dentists of Pittsburg, taking an active interest in all that tended toward the elevation of his profession. He is the author of many articles on dental subjects, and devised the method of capping pulps with creosote and oxid of zinc. At the present writing, though about ninety years old, he is in good health and is living in California.

Calvin King, a brother of James, began practice in 1847 at the same address, and is still in practice there, with his son, Dr. Harvey King. Calvin King is eighty-four years of age, and has practiced continuously at his present location for over sixty years. Like his brother James, he has always been one of the representative men of the dental profession.

At a later period, two other brothers of James King took up practice, namely, Milton and Courtland. Courtland was the inventor of the King Automatic Mallet, an instrument which, while it has never had an extensive sale, is considered indispensable by the few operators who have been fortunate enough to obtain it. There are not many in existence, and their owners cannot be tempted to sell them. The inventor died about five years since. Dr. Milton King, with his two sons, Drs. Harry M. and Robert S., is still practicing at the original location. For the past sixty years the name of King has worthily represented the dental profession in Pittsburg.

About 1850 several new names appear in the list: G. O. Stearns, L. J. Chamberlin, R. Vandervort, M. Depuy, W. F. Fundenberg and J. Scott. Of the first two little is known. Dr. Vandervort for many years took an active part in dental matters, and enjoyed an excellent practice. Dr. M. Depuy was a graduate in medicine, and began practice on Wylie avenue. He ever took a prominent part and interest in his profession, and was one of the organizers of the first dental society in Pittsburg, being its first secretary. He invented an important improvement in the handles of forceps. He has two sons in dental practice in Pittsburg at the present time, Drs. Leopold and Hiram Depuy.

Dr. Hiram Depuy has taken an active interest in the advancement of dentistry. He is a graduate in medicine, as well as dentistry, and has had the advantage of an exceptional education. He has been president of the Odontographic Society, and for a number of years was president of the State Board of Dental Examiners of Pennsylvania.

Dr. W. F. Fundenberg is a brother of Dr. Geo. B. Fundenberg. He was one of the organizers of the Dental Association of Allegheny County, in 1852, the sixth dental society to be organized in America. Until a few years since he continued in active practice and is at present enjoying his declining years in peace and comfort at Atlantic City, after a long life of usefulness in the practice of dentistry. He is a graduate in both medicine and dentistry, and next to Dr.

James King is the oldest dental graduate in Pittsburg. He was succeeded in his practice by his three sons, one of whom, Dr. Walter H., was one of the organizers of the Pittsburg Dental College, and for a number of years was dean of that institution. About 1856 Drs. Henry Ahl, Chas. F. Henosee, H. Manchester, J. Westbay and Jas. T. Hullihen appear in practice, the last named being a relative of Dr. S. P. Hullihen.

Of these pioneer dentists none are living except Calvin King, Dr. James S. King and Dr. W. F. Fundenberg, and, strange to say, the two latter were the first two Pittsburg dentists to receive the dental degree.

Dr. Templeton is a graduate of the Jefferson Medical College and of the Pennsylvania College of Dental Surgery. He entered practice in Pittsburg in 1852. He has always taken an active part in dental society work throughout the country, and was the only Pittsburg dentist among the organizers of the Pennsylvania State Dental Society, which took place at Philadelphia in December, 1868. He was one of the organizers of the Pittsburg Dental College, and was its first dean, serving in that capacity for several years.

Dr. Hugh W. Arthur is a graduate of the Baltimore College of Dental Surgery. In 1868 he commenced practice in Pittsburg. Dr. Arthur has held all the offices of prominence in the local and state societies, was an organizer of the Pittsburg Dental College, and for many years was professor of operative dentistry and dental anatomy in that institution. He is at present a member of the State Dental Examining Board. He has invented numerous ingenious dental instruments and teaching appliances, the most important probably being the Typodont, a teaching device that has received the marked approval of the leading dental schools throughout the world.

For various reasons dental societies have had rather a precarious existence in Pittsburg. The first one to be formed was the Dental Association of Allegheny County, the name afterwards being changed to the Pittsburg Dental Association. It was organized October 2, 1852, and was the sixth dental society to be formed in America. Those actively interested in its organization were: Wm. M. Wright, John Scott, M. Depuy, Robert Vandervort, W. F. Fundenberg and Wm. Bachop. The constitution and by-laws indicate that the men who formed this society were men of culture, education and the highest professional ideals.

About 1862 another society was organized for the purpose of maintaining a dental infirmary, where the poorer class of patients might receive dental attention. This infirmary was located on Penn avenue, above Eighth street, and continued about one year. It was operated partly to correct the abuses brought about by the operations of several advertising firms of quack dentists.

On November 10, 1874, the Pittsburg Dental Association was formed and continued active until 1890, when it joined forces with the Odontological Society of Western Pennsylvania, which latter was organized about 1881. The combined societies took the name "Odontographic Society," which a few years

later was changed to "Pittsburgh Dental Society," under which name the organization still exists.

In 1895 some of the members of the Odontological Society who had taken part in the combining of that society with the Pittsburg Dental Association, withdrew from the Odontographic and re-formed the Odontological Society of Western Pennsylvania.

The first dental educational institution in Western Pennsylvania was organized in 1896, as the Pittsburg Dental College, by Drs. J. G. Templeton, H. W. Arthur, W. H. Fundenberg, G. L. Simpson, J. H. Beal and S. L. McCurdy. The institution shortly became affiliated with the Western University of Pennsylvania and continued in this relationship until 1905, when arrangements were made culminating in its transfer by its owners—Drs. J. S. Ashbrook, C. R. Jones, S. L. McCurdy, H. S. Haslett, W. L. Fickes and H. E. Friesell—to the Western University, which then acquired sole ownership of the dental college.

The growth of the Pittsburg Dental College has been phenomenal; in twelve years it has graduated between four and five hundred students, and has made an enviable reputation through the success and high standing of its alumni. In 1898 an alumni association of the institution was formed. It supports the Delta Sigma Fraternity and both are in a flourishing condition.

The present faculty is composed of Dr. S. B. McCormick, chancellor; Dr. H. E. Friesell, dean; Drs. O. L. Hertig, H. S. Haslett, J. S. Ashbrook, S. L. McCurdy, C. R. Jones, D. W. Flint, W. L. Fickes, F. A. Rhodes, A. F. Judd, F. C. Friesell, R. H. Boggs and Ralph L. Smith, Esquire, professors and lecturers; and Drs. Robert Zugsmith, A. C. Barclay, F. H. Magill, J. H. Crawford, J. F. Biddle, J. G. Fitzhugh, J. R. Cottom, O. C. Schlag, C. O. Booth, A. M. Martin, H. S. Smith, A. B. Walgren, Frank S. Post, Geo. W. Pollock, H. C. Feldstein and F. J. Blumenschein, demonstrators.

Among the younger members of the dental profession in Pittsburg are many whose ability is widely recognized. Dr. Harrison D. Best is the inventor of the Best Tube and Removable Pin Crown and Bridge System. Dr. C. J. Reynolds has given to the dental profession a number of valuable mechanical appliances, some of which bear his name. Dr. Wm. L. Fickes has devised an appliance for crown and pin removing, has invented a porcelain hollow pin crown, and is considered an authority on dental ceramics.

At the present writing there are approximately three hundred and fifty dentists practicing in Greater Pittsburg.

The first free dental clinic was established in 1907 by the Western University of Pennsylvania, at the Pittsburg Free Dispensary, in Federal street, the Dispensary Association supplying the room and the university paying for the equipment and maintenance of this charity. Doctors Ashbrook, Fickes and Zugsmith compose the dental staff.

CHAPTER X.

Hospitals.

The Western Pennsylvania Hospital is one of the great institutions of the city and would be worthy of being called great in any city. On January 1, 1905, there were 209 patients in it and during the year it admitted 2,783, making in all cared for that year, 2,992. The percentage of deaths among them was seven and thirty-three hundredths. The total number of patients admitted in fifty years, 1857-1905, was 10,119, of whom 2,710 were restored to health, 2,686 died, 1,784 were improved and 2,940 were not improved. In that time there were 5,766 males and 4,353 females admitted. This hospital originated sixty years ago. On March 19, 1847, a number of prominent men met in Pittsburg and formed themselves into an association, the object of which was to establish a hospital. All were citizens of the cities and the officers they selected were as follows: Thomas Bakewell, president; George Breed and John Graham, vice-presidents; M. Allen, T. Bakewell, John Harper, John Bissell, George Breed, J. Carothers, William Ebbs, John Graham, George Hogg, William Holmes, John Irwin, George W. Jackson, F. Lorenz, S. Lothrope, O. Metcalf, J. K. Moorhead, Jacob Painter, J. N. Schoenberger, Charles Spang, William Totten, William Wilkins, W. W. Wallace, managers; and Harmar Denny and David Shields became life managers. The matter was further agitated during the ensuing year and on March 18, 1848, the legislature passed an act incorporating the Western Pennsylvania Hospital and named the above men as incorporators. There is a provision in the act allowing citizens to become life members of the incorporation by the payment of one hundred dollars. Harmar Denny and David Shields became life members at once and three years following the incorporation two hundred and twelve others had become life members. The first president, Thomas Bakewell, served until 1866, when John Harper, the eminent banker, was made president. The first object of the members was to secure a good location. A donation was offered them in the Twelfth ward of Pittsburg, the square being bounded by Ferguson, Smith, Fisk and Morton streets, containing twenty-four acres. The managers accepted this and at once proceeded

to erect a building to be used as a hospital. It was divided into medical and surgical wards after the best methods known in that day and was opened for patients in January, 1853. In 1855 the legislature appropriated ten thousand dollars with the understanding that insane patients should be admitted and cared for by it. The act designated the district from which insane patients should be received and included all of Western Pennsylvania, twenty-one counties in all. It also provided that the governor of the state, the judges of the county courts and the members of the legislature should be made officers of the hospital by virtue of their office. On March 19, 1856, the legislature appropriated twenty thousand dollars to construct additional buildings to accommodate the insane. These buildings were to be approved by the governor, who was authorized to appoint three managers on the part of the state, and it was further made obligatory on the part of the hospital authorities to submit an early report, made out and duly certified, to the legislature, giving the condition of the affairs of the hospital. It was thought best on the part of the managers after mature deliberation to erect a separate building for the insane. The selection of a location for this building gave them a great deal of trouble and they examined into the matter with much deliberation. They demanded a place of easy access, large acreage and of a commanding and cheerful view for these unfortunate wards of the state. This would not have been difficult had it not been provided further in the Act of Assembly that "No part of the State appropriations should be expended in the purchasing of the grounds." A farm was then purchased on the Monongahela but it was afterwards sold on the advice of Miss Dorothy L. Dix because it was inaccessible by railroad and for other reasons which she gave. Miss Dix was then at the height of her fame and was distinguished throughout the country in her day as one who had given most of her life to the amelioration of the more unfortunate human beings. Her advice was therefore solicited and heeded in this matter. She came to Pittsburg and accompanied the board of managers in their trips to view prospective locations for the hospital. After visiting most that were considered possible a selection was made, mainly on her advice, on the north bank of the Ohio about seven miles below the city limits. This was a farm which was bought by private benefactions from the citizens of Pittsburg and Allegheny and vicinity. The board afterwards purchased three adjoining tracts of land, the money to pay for which was raised in the same way. The farms unitedly contained three hundred and seventy acres. The property was easily reached by rail or by river. It had on it an abundant supply of pure water which came from a source high enough to take it by gravity to any part of the house. It had, moreover, the advantage of having a quarry of good building stone on it and it had a commanding view. All these qualities doubtless recommended it to Miss Dix and to the viewers appointed to make the selection. In honor of Miss Dix the hospital was named Dixmont and this also became the name of the station on the Pittsburg, Fort Wayne and Chicago railroad which passes through the lower grounds of the hospital for a distance of about half a mile.

From the railroad or the river the grounds rise rapidly and about half way up the slope the house was erected. Thus they secured a most commanding and picturesque view and the imposing structure does credit to all who were connected with its original location and construction. It is a hospital where the physician may "minister to a mind diseased," an asylum for the most pitiable and unfortunate members of the human race. The work on the central part of the present building was begun early in May, 1859, and the corner stone was laid on July 19 following, with appropriate ceremonies and in the presence of many visitors from abroad. The original building was wisely constructed so that wings could be added without marring the symmetry of the structure. It is now nearly a thousand feet long and has a capacity of fourteen hundred patients. The first superintendent was Dr. Joseph A. Reed, who was elected in 1856 and filled the position with marked ability until his death on November 6, 1884, when Dr. Henry A. Hutchinson took his place.

When Dixmont was sufficiently completed to be ready for patients, the insane in the Western Pennsylvania Hospital were removed and kept within its walls. At the same time the Civil war had come in all its horrors and its untold demands for hospital service, even at this distance from the seat of action. There had been but little preparation made in any city for soldiers who were disabled in battle or broken down by exposure and sickness. But with the additional rooms gained in the Western Pennsylvania Hospital by the removal of the insane to Dixmont, Pittsburg could do more than many larger cities were able to do. The managers promptly tendered to the secretary of war the use of the hospital in the Twefth ward for all soldiers who needed hospital treatment. The offer was accepted immediately, for such accommodations were very soon in great demand. The hospital was filled and frequently outside structures were erected by the people of Pittsburg so that nearly a thousand patients were cared for at one time. After the close of the war it was kept open as before. The Sanitary Fair, to which we have referred elsewhere, gave the hospital about two hundred thousand dollars which was used as an endowment fund. For ten years after the war it continued to be a special hospital for the treatment of such disabled volunteers as were in need of hospital treatment. It has since then been used as a general hospital. It is supported by the income from its endowment fund, from the donations of the benevolent citizens of the cities and by appropriations from time to time that are given it by the state legislature. No patient has ever been refused admittance because of his want of money to pay for the treatment desired, nor has the city or the county ever aided in its support. Patients who are able to pay are charged a reasonable sum.

The larger donations to the hospital have been given by Charles Brewer, whose executor turned over to the hospital something over fifty thousand dollars, which had been devised to the hospital through his will. James Crawford also gave ten thousand dollars to the same institution.

The Presbyterian Hospital of Pittsburg and Allegheny was organized and incorporated in 1895. It was the benevolent work of the ladies of the Presbyterian churches of the two cities, who held their first meeting in the Young Men's Christian Association in Pittsburg in July, 1895, and had in view the suffering patients of poor people, especially. Soon after the organization of this society one thousand dollars was given from the estate of Miss Margaret McDonald. Two houses were leased on Sherman avenue in Allegheny and the hospital was opened May 10, 1895. In 1900 it was removed to number 1191 Ridge avenue, Allegheny, its present site. Its literature carries the following: "Presbyterian in its burdens, because founded by Presbyterians; undenominational in its benefits, because it is for the reception of patients irrespective of creed, nationality or color."

In 1906 building operations were active in the erection of a new hospital building which will, when completed, stand second to none in the twin cities in point of accommodations. The original contract was for $167,000, to which fund much more is being raised and the new home for the hospital will be completed in the near future. An appeal has been made to the state for a large appropriation. The 1907 annual report shows that this hospital cared for four hundred and thirty-nine patients and for want of room many more were turned away. Only seventeen deaths occurred during 1906. Of the patients treated, 349 were American and ninety were of foreign nativity.

Mercy Hospital is the oldest in Pittsburg or in Western Pennsylvania. It was founded in the first half of the nineteenth century by the Sisters of Mercy of the Catholic church with the active aid of Bishop O'Connor and the help of charitable citizens. It was opened to the public and launched upon its worthy mission in January, 1847, in the old Concert hall, corner of Penn avenue and Sixth street. In May, 1848, the hospital was moved to their new building on Stevenson street. It cost but $15,000 and yet it had made provision for sixty beds, only twenty-five of which could be used for lack of furnishings. The original building had three stories and a basement and served well the purpose for which it was erected. During the great smallpox scourge in 1849 Mercy Hospital opened wide its doors to care for the sufferers, there being no municipal hospital or pest-house in Pittsburg then. Again, in 1854-55, when Pittsburg was visited by dread cholera in the epidemic form, this hospital was filled to overflowing. The self-sacrificing Sisters even gave up their own beds and rooms that a few more might be cared for. They nursed the sick by day and night, seldom resting themselves during that awful period of distress. Only one man was left in the institution aside from the patients and he was there for the purpose of making rude coffins for those who died of the cholera.

At the time of the Civil war many Union soldiers were cared for within the walls of this hospital and for which service the United States government gave the institution the sum of ninety-four cents a day for each patient. In 1872 the smallpox made its appearance as an epidemic in Pittsburg, and the Sisters of Mercy, who owned a large building on Bluff street, in which they

had established an industrial school for poor working girls, converted it into a temporary hospital and in this house they cared for as many as fifty men at one time, nursing them for many months; for this the city gave them $10 a patient.

Up to 1882 this institution was the private property of the Sisters of Mercy, but in that year it was deemed wise to incorporate as a charitable institution, thus entitling it to state aid. This was accomplished and Thomas Carnegie was made president of the corporation board. It again outgrew itself and more room was needed, when an addition was built at an expense of $75,000. Through Col. James P. Barr's efforts about $30,000 was raised by subscription from citizens of Pittsburg and vicinity; the state gave an appropriation of $30,000, and William Thaw gave $20,000 toward the furtherance of the humane work of curing disease and alleviating pain. A debt which had been hanging over the hospital for so long was all paid off and ample room provided for one hundred and fifty patients. The total number of patients admitted to Mercy Hospital from 1848 to 1907, inclusive, was upwards of ninety thousand. In 1905-06 the state of Pennsylvania appropriated on account of maintainance, $45,500, and for buildings $50,000. The amount received from patients was $124,000 and from all other sources $24,000, making a total of $224,175. The reports from this hospital in 1906 show that from October, 1904, to May 31, 1906, there were 6,988 patients admitted to the institution, exclusive of ear patients. In all departments 10,931 cases were treated. In the last twelve months of the period named there were 1,238 charity cases treated. This institution is in charge of the Sisters of Mercy, with a large staff of skilled physicians and surgeons.

The Pasteur department for the treatment of patients bitten by rabid animals, was established December 10, 1900, and has come to be a very important department. Treatment is here given by inoculation, according to the method described and devised by the celebrated M. Pasteur, of Paris, France, for the prevention of hydrophobia or rabies. Under this treatment at this hospital all but about six cases in one hundred are cured, whereas in the olden time, before this was known, fully eighty-eight per cent. proved fatal.

The Allegheny General Hospital, of Allegheny City, was founded in 1882 under a charter from the state of Pennsylvania. It is maintained by voluntary contributions. The board of directors consists of twenty members. A modern training school was added in 1886, to give instructions to women who are desirous of becoming trained nurses. This institution faces East Park and is a useful adjunct to the hospital. The hospital buildings on Stockton avenue, recently completed, are models of modern convenience in every particular. It is a very large hospital and contains 365 beds, with wards for surgical cases, operating rooms, dispensary and diet kitchen. The present building was first occupied in 1904 and gives the most satisfactory results. It was erected with the hope of an endowment of a million dollars, which has not yet been realized, but donations are constantly being made toward building up a great

humane institution. Among these gifts may be mentioned that of John Porterfield for $100,000; D. E. Park, $65,000, and John Lockhart, who bequeathed $20,000.

The last published report of this hospital shows an appropriation of $50,000 from the state of Pennsylvania; from private room patients, $44,000; from ward patients, $22,000. The number of patients admitted during the year, 4,394. The total expenditure for the year was $145,084, while the net cost of maintainance was $139,624. This seven story hospital is provided with every known appliance to administer comfort and relieve pain for the thousands who enter its wards and trust their lives to the staff of competent physicians and surgeons in attendance.

WESTERN PENNSYLVANIA INSTITUTION FOR THE BLIND.

This institution was established in 1887 for the special benefit of the blind youth in the western part of the state. It is in no sense a home or retreat for aged or infirm blind people; nor is it a hospital for the treatment of the eyes, but strictly an educational institution. It was founded by money bequeathed for that purpose by the will of Miss Jane Holmes. It is located in Bellefield, Pittsburg, fronting on Bayard street. It was incorporated under the laws of the state, and pupils who are unable to pay for their tuition, or contribute anything toward their support, are given the full benefit of the school free of charge. It is one of two schools of the kind in Pennsylvania, the other and older one being at Overbrook. The spacious buildings are models of a high architectural skill, and are built of pressed yellow brick. Everything for the comfort and instruction of the unfortunate blind is here provided without stint. The beautiful plot of ground upon which the institution stands was the gift of Mrs. Mary Schenley. The mellow-toned pipe organ was the gift of Andrew Carnegie. Gifts are received annually from those who are able and know of the great work being carried on. During the last year among the donations were $20,000 from John Porterfield. The twentieth annual report of the institution states that the number enrolled in this school was 108, fifty-five coming from Allegheny county, while the remainder were from twenty counties in Western Pennsylvania. The work of the institution is divided into five departments, viz.: Literary, Music, Industrial, Physical Training and Household. The industrial department has for a leading feature a broom-making shop, where the workmanship compares favorably to any outside factory. The school has its own printing plant and the girls are kept busy at needle-work, fancy work, and in the household department. The pupils library contains 560 volumes of standard history, literature and fiction. In 1906 the Holmes-Schenley Literary Society was formed, to develop the minds of the students in such matters as debates, etc. An hour spent in the class rooms of this school will convince anyone of the utility of such an institution. Here one sees the blind writing a good hand, solving difficult mathematical problems,

studying physiology, typewriting, music and a score of useful things which will be of benefit and pleasure to the blind pupils when grown to manhood and womanhood.

During the year 1906, the state, which has been liberal with her appropriations to this institution, in the main, appropriated for its maintenance $32,899. The institution has been under the management of one superintendent from its inception to 1907, when Professor Jacobs resigned and Professor Thomas S. McAloney was appointed. It is an incorporated institution and under a board of directors; the president is H. Kirke Porter, while the officers and teachers number twenty.

In 1905 the state began to aid, in a small way, the Children's Hospital on Forbes street. The buildings are entirely too small and not unfrequently is it necessary to turn away, for lack of room, many of the little sufferers who seek admittance. In 1906 two hundred and fifty-eight children were treated in this humane institution.

The Homeopathic Medical and Surgical Hospital and Dispensary of Pittsburg, now located on Second avenue, but soon to have a new home in the East End, was founded by the early homeopathic physicians and raised to its present standing largely through their energy and industry. Up to about 1861 the homeopathic school of medicine was not fully recognized on an equal footing with the regular school in the hospitals of Allegheny county, and for this reason an effort was made to provide a hospital of this school where the theory and practice of homeopathy could be advanced. In April, 1861, a charter was obtained from the state through an act of the legislature. Lots of ground belonging to James B. Murray, on Second avenue, near Smithfield street, were purchased by Drs. Marcellin Cotë, John C. Berger and H. Hoffman, who retained the same until the organization was perfected. The purchase price of this land was $22,000. Ground was first broken for the buildings in 1865. The hospital was opened up to the general public in August, 1866, with accommodations for thirty-eight patients. At the opening United States Judge Wilson McCandless presided and was the first president elected. He was active in getting the hospital in running order.

The first chairman of the executive board was Dr. Marcellin Cotë, who served three years, until his health failed and he resigned. He was influential in the early history of the hospital and is entitled to great credit as one of the founders.

About 1883 more room was demanded, so popular had the institution become, and $100,000 was raised, of which the late William Thaw gave $25,000; Miss Jane Holmes, $15,000, and later she left a legacy of $10,000 more for the use of the hospital. Others gave freely and the state made an appropriation of $50,000, which made up the $100,000 needed for providing more buildings. The ladies' society held festivals and fairs in the autumn of 1883, by which they netted $17,000, which with other monies donated by ladies, furnished the

building. The hospital cost, all told, $233,000, of which the state appropriated $100,000. The new building was opened April 1, 1884. Mrs. Robert Pitcairn and Mrs. William Thaw contributed an ambulance and horse for the use of the hospital.

In 1889 an endowment fund was started, beginning with $12,000 donated by different persons, and with $25,000 by William Thaw, who was ever a friend of the institution. In 1892 an eye and ear dispensary was added at the timely suggestion of Mrs. William Thaw. This building—an annex—cost $27,000, exclusive of the furniture. Nearly fifty thousand persons have received medical treatment at this hospital since its establishment in 1866. In 1906 this hospital cared for 3,609 patients, sixty-five per cent. of whom were charity cases. The average of patients each day was one hundred and fifteen. The ambulance was called out during the year 458 times. In various departments there were performed 1,366 operations.

A few years ago it became certain that with the growth of the city, larger, more quiet and up-to-date quarters must soon be provided for this hospital, and the board commenced to prepare for the selection of a site and the erection of such quarters. Finally a good location was obtained in the East End of the city, on Center avenue, in the Shadyside district, where land was secured for $135,000, all of which was paid for except $10,000. The state generously appropriated $100,000 towards grounds and buildings. The plans and specifications show the new buildings to be modern in every detail and spacious enough for many years to come, with ample room to add to when desired. This new building was begun in the month of August, 1907.

This hospital maintains a first-class training school for nurses and has a ladies' auxiliary which had been of great service. The officers of this society are as follows: Mrs. William Thaw, president; Mrs. S. Jarvis Adams, Mrs. George Anderson, vice-presidents; Mrs. George L. McCoy, secretary, and Miss Marian E. Bingham, treasurer.

Aside from the hospitals already named, there are the following doing their office work and ministering to the needs of the distressed:

The Allegheny General Hospital, which was chartered October 18, 1882, and opened December 31, 1887. An annex was built to this institution in 1890 and in 1903 the present buildings were erected. Three thousand patients are annually cared for in this hospital.

South Side Hospital, founded by Dr. J. M. Duff, was started as an emergency accident hospital in 1889, in the mill district of the South Side. In 1893 the corner-stone of the present building was laid. This is situated on Twentieth street and cost $150,000, all built by subscription. The state now aids in its operation.

Saint John's General Hospital, at Woods Run, is in charge of the Protestant Deaconesses, from the Mary Drexel Home, Philadelphia. The building was begun in the summer of 1895 and cost $17,000.

Passavant Hospital, first known as Pittsburg Infirmary, is among the oldest Protestant hospitals in America. It began its mission in 1849. Dr. W. A. Passavant and wife, aided by friends from the Sisters of the Institute of Protestant Deaconesses, were the founders. At first the hospital was but a small house, where patients were treated, but objections were raised in the neighborhood and another location was finally selected at the corner of Roberts and Reed streets, where the institution is today, doing good service. The first building was erected in 1851, while the present one was built in 1895. It is a fine up-to-date structure and is in the charge of the German Deaconesses.

The annual report of the Passavant Hospital for 1906 gave the number of patients admitted during that year as 1,324.

Pittsburg's Hospital for Children was made possible through the untiring efforts and money donated by Miss Jane Holmes, whose philanthropy is so well known in many such channels in Pittsburg. It was incorporated March 18, 1887. The present building was opened in 1890. This is a "special hospital" and is managed by a board of visiting ladies and has been largely sustained by wealthy parents who have met with the loss of their own children and have ever since been mindful of the needs of suffering children.

The Ear and Eye Hospital of Pittsburg was organized in 1895, and is free only to those who are unable to pay, but to such the charter calls for free treatment. The most skillful specialists in the city are on the attending staff of operators.

Rosalie Home Foundling Asylum and Maternity Hospital was organized in November, 1891, by the Sisters of Charity. This institution cares for many "unfortunate" cases within the city, and only exemplifies the fact that modern civilization and Christianity seek to relieve pain and sorrow among all classes.

Other hospitals are: Municipal, on Bedford street; St. Francis, on Penn avenue; St. Margaret's Memorial Hospital, and the East End Hospital on Frankstown and Beechwood streets.

In addition to the regular hospitals named, there are many benevolent institutions within Greater Pittsburg, which show the humane spirit of her people. Among these may be named:

The Allegheny County Prison Society, Allegheny Free Dispensary, Allegheny Fresh Air House, Bethesda Home, Children's Home, Christian Home for Girls, Christian Home for Women, Curtis Home, Episcopal Church Home, Florence Crittenden Home and Rescue Association of Pittsburg and Allegheny, Friends of Israel Unions, German Protestant Home for Aged, Gusky Orphanage and Home, Home for the Aged and Infirm (colored), Home for the Friendless, Home of the Good Shepherd, Home for Working Girls, House of the Merciful Savior, International Reform Bureau, Kingsley House, Memorial Home for Crippled Children, Methodist Deaconess Home, Pittsburg and Allegheny Protestant Orphan Asylum, Newsboys' Home, Reformed Presbyterian Aged People's Home, St. Joseph's Catholic Asylum, St. Peter's Orphan's Home, United Presbyterian's Orphan's Home, Widow's Home, etc.

CHAPTER XI.

Railroads.

From the earliest dawn of history to the present time, the problem of transportation has taxed the resources and ingenuity of mankind. In our state, as we have seen, it was a long and tedious journey from Pittsburg to Philadelphia. This journey was first made on pack horses, which in time gave way to the stage coach, and still later it was made by canal boats. If the passenger by a continuous ride was able to make the trip from Pittsburg to Philadelphia in fifty hours he thought he had had a rapid transit, and he had actually done much better than the average. But with the completion of the Pennsylvania railroad the time of passage between the two cities was at once reduced to twelve hours, and this has since been still further shortened. The building of the Pennsylvania railroad was one of the first railroad projects in America. On March 23, 1823, our legislature incorporated a company to construct a railroad from Philadelphia to Columbia, a town on the Susquehanna river in Lancaster county, about eighty miles northwest of Philadelphia. It was not promptly built, but the agitation helped to prepare the public mind, and this contributed greatly to its ultimate success. Among its incorporators were Horace Binney and Stephen Girard of Philadelphia, while John Stephens, of New Jersey, was a leader in the enterprise. At that time the people in Pittsburg had no faith in railroads. Most of the western element regarded agriculture as the basis of all wealth, and many were of the opinion that steam transportation would injure the farm by reducing the price of horses, oats, etc. But New York in 1826 had completed the Erie canal, which connected the western lakes with New York City, and the members of the Pennsylvania legislature were bright enough to see that something must be done to counteract this, or the western trade would pass by that route to the seaboard. The Erie canal carried about $70,000,000 worth of products east the first year after it was completed, and this amount increased each year. It is true that we had a canal connection between the Ohio Valley and Philadelphia and the East, but it was hopelessly broken by the Allegheny mountains, and was at best a poor rival for the unbroken northern waterway across New York. The completion of the Erie canal was a sad blow to Philadelphia and our state in general, for it stimulated the New York trade at the expense of Pennsylvania. In 1828, therefore, the canal commissioners were directed to complete a rail-

road from Philadelphia to Columbia within two years, and to examine by surveys a route over the Allegheny mountains with the ultimate purpose of thus reaching the navigable waters of the Ohio river at Pittsburg. Our state therefore appropriated two million dollars for the purpose of opening a better method of transportation and travel between the Ohio and the eastern seaboard. This was a large sum for that day, but the legislature shrewdly solved the problem. They extended the charter of the Bank of Pennsylvania for eighteen years on an agreement that the bank would lend the state four million dollars at five and one-half per centum interest. This money all went into canals and railroads between Philadelphia and Pittsburg, and with a part of it was built the Columbia railroad and also the Portage road across the Allegheny mountains. Thus in a measure they triumphed over the apparently insurmountable barrier between the East and the West. Under the circumstances, the Old Portage road, as it is now called, has not been surpassed or equalled by any system of railroad building in America. It consisted of eleven levels, or grade lines, and ten incline planes. The cars were drawn over the levels by locomotives, and they were drawn up the incline planes by wire ropes attached to stationary engines at the tops. It was operated for twenty years, and was one of the wonders of American railroad building. From Johnstown east the mountain was ascended by five inclines with an aggregate length of 9,670 feet. This raised the train 800 feet. The five inclines on the eastern slope of the mountains, with an aggregate length of 13,499 feet, lowered it going eastward 1,202 feet. The tracks between the inclines, though they were called levels, were not quite level, but were constructed so as to gradually raise or lower the train according to the direction it was going. Thus, by means of these two railroads and the canals, a continuous line of travel and transportation was opened up between Pittsburg and Philadelphia as early as 1834. The line consisted of a railroad from Philadelphia to Columbia, eighty-two miles; then came a canal reaching from Columbia to Hollidaysburg, 172 miles; then the Portage road from Hollidaysburg to Johnstown, thirty-six miles, and a canal from Johnstown to Pittsburg, 104 miles. This made the distance only 394 miles. The distance by turnpike was nearly a hundred miles less, but by railroad the distance is yet about 352 miles, so that the old canal was laid out with a high degree of engineering skill. Their greatest loss was in being compelled to follow the river from Johnstown to Pittsburg. Freight had to be handled at every transfer and its transportation was slow and expensive. The state had expended many million dollars on the project and never realized anything of value from it in the way of dividends. But it was of untold benefit to the country through which it passed, and to Pittsburg, and by the development of natural resources, the state was, in the end, an abundant gainer.

Almost as soon as this route was finished a project was set on foot and agitated constantly to supplant the canals with a railroad. On March 6, 1838, a general convention was held at Harrisburg to urge the building of the

road to Pittsburg. Delegates were present from twenty-nine counties of the state, and a good number of prominent men from Ohio, particularly from Cleveland, were present, who were interested in securing a shorter route to the East. Not long after this Mr. Charles Schlatter was appointed by the canal commissioners to survey and report the best route upon which to build a railroad from the Susquehanna to the Ohio. Hother Hague, a distinguished engineer, had already surveyed a route across the mountains, but it was many miles south of the Portage route or the present line and was objectionable because of its length. In 1840, Schlatter reported three routes which he had surveyed across the mountains. The one called the northern route was the most formidable in its claims as against the southern route or against the route selected. It passed up the Susquehanna river and down the Allegheny to Pittsburg, and while it was longer than either of the others, it had an advantage which appealed to all, for by a short branch to the northwest Lake Erie, with all the commerce of the northern lakes which was then passing through New York state could be reached and easily diverted to the proposed road across Pennsylvania. The route which was most pleasing to the best informed men of that day, followed the Juniata and crossing the mountains passed down the Conemaugh river to Pittsburg. It was the one that was therefore adopted. It was Schlatter who by this route first demonstrated conclusively that the Allegheny mountains could be crossed without using incline planes. It is a mistake to say that because the company has since expended vast sums in shortening their route, the original engineers were incapable. Economy forced them to avoid deep cuts and fills, and in doing so, in many instances, to adopt heavier grades and longer routes. With improved machinery and abundant means, these have since been largely overcome, but they were necessary in building a road that was largely an experiment and that was built with but a limited capital. Though fully determined on, the project did not assume a definite shape until 1846, when on April 13, an act incorporating the Pennsylvania Railroad Company was passed by our legislature. On February 25, 1847, Governor Francis R. Shunk granted a charter to the company, and work was begun on it almost immediately at both ends, that is, at Pittsburg and at the western terminus of the eastern branch near Harrisburg. The grading of fifteen miles east of Pittsburg was let on July 22. On September 17, 1850, the road was opened as far west as Hollidaysburg, where it was connected with the Portage road across the mountains. In May, 1851, twenty-one miles of the road going west from Johnstown were finished, leaving yet a gap of twenty-eight miles between that and the Pittsburg end. The year following this gap was closed up, and on December 10, 1852, cars began to run through from Pittsburg to Philadelphia. The Portage road was still used by which to cross the mountains, but on February 15, 1854, the road over the mountains was finished, and trains began that day to pass continuously from Pittsburg to Philadelphia by the same general route that is still in use. It was considered a great achievement in railroad building. Since railroads were first thought of,

the Allegheny mountains had been considered an insurmountable barrier. A great deal of credit for this final triumph was due to the representatives and senators in the Pennsylvania legislature. They were men of more than average ability, who foresaw the possibilities of the western part of the state if the proper means for its advancement were taken.

Though the Pittsburg, Fort Wayne & Chicago railroad had been completed as far west as Beaver a short time before this, the completion of the

ALONG THE BALTIMORE & OHIO RAILROAD, PITTSBURG DIVISION

road to the East was the great event in Pittsburg history. For almost a generation they had been projecting it and now at last it was a reality. Citizens of all ages gathered at the stations or along the line eastward to see this new wonder of the nineteenth century. Though poorly equipped and only an embryonic form of the road as it is to-day, travel by railroad was the marvel of the age, not only among the rural people, but in all classes. The celebrated Joshua R. Giddings, one of the ablest lawyers and statesmen of his day, when on his way to Washington to assume the duties of his long and noted career in congress, took his first ride on a railroad, the Baltimore & Ohio. The experience was so remarkable to him that he made the following note of it in his journal. Its uniqueness, says a prominent railroad man of the present day, entitles it to a conspicuous place in any railroad literature: "At eleven o'clock about one hundred and twenty passengers, seated in three cars, carrying from forty to sixty passengers each, started upon the Baltimore & Ohio railroad for Washington. The cars are well carpeted and the seats cushioned.

We also had a stove in each car which rendered them comfortably warm. Thus seated, some conversing in groups, others reading newspapers, and some from loss of sleep in travelling sleeping in their seats, we were swept along at the rate of fifteen miles per hour. At the usual time, candles were lighted, and we presented the appearance of three drawing-rooms filled with guests travelling by land. At about seven o'clock we arrived at Washington city. The moment we stopped we were surrounded on every side with runners, porters, hackmen and servants, one calling to know if you would go to Gadsbys, another if you would go to Browns, another if you would take a hack, etc. They are a source of great annoyance which the police ought to prevent."

The *Baltimore Federal Gazette*, in 1823, said:

"If a railway can be constructed in any country where a canal could be made, and in many situations when canals are impracticable through want of water; if loaded boats and wagons have been raised and let down 220 feet on some of them; if they can be completed and kept in repair for far less expense than canals, and do not occupy one-fourth part of the room; if they cause no bilious or intermittent fever in the country through which they pass; and if five or six wagons each loaded with twenty hundred-weight can be impelled with a velocity of ten or twelve miles per hour by means of one of Perkins steam engines, expending two or three bushels of coal, from Pittsburg to Baltimore; if these things be so, and they can all be demonstrated, is it not time to abandon impossibilities and think seriously on a subject of greatest importance?"

The *Greensburg Gazette* of March 25, 1824, has a picture representing a railroad engine drawing three cars laden with coal. Three columns of the paper are devoted to a description of this wonderful motive power then recently introduced in England. The editor thought it marvelous that three cars filled with coal could be transferred by one engine twelve or fifteen miles per hour. He informed his readers, however, that it would be impossible to introduce such a method of transportation in Western Pennsylvania because of the hills. "It would require too many engines to haul the cars over the hills. It can never be used near Greensburg because of the hills, because we are situated on one and surrounded by them on all sides." To further illstrate the popular idea, the well authenticated story of James Burns presents itself. He had been a contractor in building the Pennsylvania canal, and was afterwards canal commissioner, but was extremely incredulous as to the power or possibility of steam engines to surmount and draw carriages over the crest of the Allegheny mountains. Meeting J. Edgar Thomson, then an engineer on the proposed road over the mountains but who in after life became one of the road's most distinguished presidents, Burns asked him—how many miles an hour an engine could run over the eastern end of the road which was already constructed. Being told, he then asked how many hours it would take for a train to run from Pittsburg to Philadelphia when the road was completed. Thomson told him it would require fifteen. In telling this story shortly afterwards Burns said, "Then I knew that Thomson was a raving idiot."

While railroads came last among the great transportation facilities of Pittsburg, they remained longest and there seems to be but little hope of their being supplanted by better agencies. Without a doubt there are but few cities in America that are more thoroughly connected with all sections by strong and splendidly equipped railroads than Pittsburg, and to this feature, in a great measure, the city owes its prominence as a manufacturing center. Though built on three navigable rivers capable of bearing, and which do bear freight, to and from all parts of the North, South and West, yet the railroads have long since wrested both the travel and freight traffic from the rivers, and left them little else than the coal trade and a few other commodities. The roads parallel to the rivers, moreover, carry thousands of tons of coal daily to the South and West.

Though railroads were agitated and dreamed of, as we have seen, in Western Pennsylvania as early as between 1824 and 1830, yet they were slow in reaching Pittsburg. The Baltimore & Ohio railroad had been extended west as far as Cumberland, Maryland, in 1842. This point is but one hundred and fifty miles southwest from Pittsburg, and naturally the Pittsburg people expected a connection and an outlet with that road, for a road across Pennsylvania was scarcely thought of then. The original purpose of the projectors of the Baltimore & Ohio railroad was that it should pass through Western Pennsylvania, but our people did not appreciate its importance then, and would not secure for the corporation the rights of way they desired. Philadelphia was moreover opposed to the Baltimore & Ohio passing through or near Pittsburg lest the trade of the Ohio valley should be diverted from Philadelphia to Baltimore. Consequently the builders of the Baltimore & Ohio were compelled at a much greater outlay, to reach the Ohio river at Wheeling, by laying its road at a fearful height across the mountains of West Virginia. At that time all corporations were chartered by direct authority of the legislature. We were under the constitution of 1838, which permitted, or rather did not prohibit, the passage of "Omnibus Bills." This was a name given to a bill with a general heading, but to which had been added an amendment or amendments providing for legislation on matters entirely foreign to that which was contained in the original measure. They were usually passed during the closing hours of the session, when the vigilance of those opposed to any special legislation which the Omnibus Bill contained was somewhat relaxed. Measures providing for the corporation of a road from Pittsburg to Cumberland to connect with the Baltimore & Ohio railroad were violently opposed by the Philadelphia representatives, and by others from the East, who wanted to hold the western trade for Philadelphia and for the eastern part of the state. As the Philadelphians and other eastern members of the legislature had a predominating power, Pittsburg had a poor show for the passage of the measure it so greatly desired. But it so happened that in the closing hours of the legislature of 1844, a bill innocent in itself, providing for the change of a street in Erie was being passed by the legislature. Mr. George Darsie, of Pittsburg,

at the last hour of the session, offered an amendment to the Erie Street Bill, which amendment provided for the incorporation of a railroad company known as the Pittsburg & Connellsville railroad. The amendment was not noticed by its enemies, and was not, therefore, objected to. It was so drawn that the company authorized by it had the additional power of extending the road, if they desired, to Cumberland. No one was paying particular attention to it, and the Philadelphians cared least of all what was done with a street of a diminutive town on the cold and dismal shores of Lake Erie. No objection was, therefore, raised to the amendment, and accordingly the original bill, with the amendment so foreign to its purpose, was passed. Governor David R. Porter promptly signed the bill, and it became a law before the Philadelphians awoke to the interpolated amendment. They were too late to apply their usual remedy. By virtue of this bill the Pittsburg & Connellsville railroad was organized, and a road was built and operated, and is now a very important branch of the Baltimore & Ohio railroad. It was built slowly, for at that time a company had been chartered by the legislature of Pennsylvania and by the legislature of Ohio, which was called the Pennsylvania & Ohio Company, and the purpose of it was to build a road from Pittsburg to the state of Indiana. Many who warmly supported the former road withheld their subscriptions and gave their support to the latter. It was, therefore, the first to be constructed, being finished in 1851, and is now known as the Pittsburg, Fort Wayne & Chicago railroad. Philadelphia being defeated in its questionable methods of retaining the Pittsburg and Ohio trade, determined to organize and build the Pennsylvania railroad. It was, therefore, chartered as we have seen in 1846. The Cleveland & Pittsburg road was also chartered. It was to begin at Rochester and to pass down the Ohio river to Wellsville and thence north to Cleveland, crossing the Pennsylvania & Ohio, now the Pittsburg, Fort Wayne & Chicago railroad, at Alliance.

The earlier roads in the eastern part of the state were made without ties, but had posts sunk to the level of the road-bed, and on these posts the rails were spiked. Soon after the posts were abandoned for ties. The wooden rails were reinforced by long strips of iron being spiked on the top of them, and on these the car wheels rolled. Solid iron or steel rails were not then thought of for iron was too expensive as it was manufactured in those days to be used as railroad rails. When the spikes in the strips of iron came out, the strips often curled up before the wheels and the ends some times punctured the bottom of the car. This was called a "snake head," and was greatly feared by the passengers. Wood was used for fuel instead of coal in making steam for the engine, and not infrequently live coals fell on the passengers clothes when the windows were up, and burned holes in them before they were noticed. In many of the early cars the seats were arranged lengthwise at the sides, and for night travel were more readily converted into bunks than the modern short seats are. Above these seats was a hanging shelf the idea of which was borrowed from the state room of a canal boat. When the car was

crowded at night, this shelf was let down and on it sleeping passengers were made as comfortable as possible. This rude car was in reality the embryonic sleeping car of modern travel.

Staging to the East was gone when the railroad was built, and the stages after the building of the Philadelphia & Cumberland railroad carried passengers only to its western terminus and it was soon extended to Harrisburg. The Cumberland Valley was also built early among the railroads, and it carried stage passengers from Chambersburg to Harrisburg, where they took the Columbia road to Philadelphia. The stage passenger who left Pittsburg in the morning reached Chambersburg by riding all day, all night and until the following evening. On the third day he could reach Philadelphia by rail from

UNION STATION, PENNSYLVANIA RAILROAD, AT PITTSBURG

Chambersburg, and frequently boasted of the time he had saved by the rapid travel between Pittsburg and Philadelphia.

There was a custom in the early days of railroad building that, when a road was projected through a new country or to a city or town of some importance, the land owners along the route and the citizens at its terminus, should help to pay in part for its construction. This was not then unreasonable, for the road added greatly to the value of the property through which it passed, and otherwise than for this assistance it might be laid through another route or to another terminus. In this way the Pennsylvania Railroad Company received a subscription from Allegheny county of $1,000,000, while the Ohio & Pennsylvania received $400,000 from the city of Allegheny alone, and $200,000 from Pittsburg. The Pittsburg & Steubenville, the Pittsburg & Connellsville, and the Chartiers & Allegheny Valley railroads received each $1,600,000 from Pittsburg, and vast sums from the county. Bonds were issued to the railroads for these sums, the interest on them being payable by the railroad

companies. In return the municipalities or county generally received railroad stocks for the amount of the subscriptions. This was all done prior to 1856, and when the business depression of 1857 came, all these railroads except the Pennsylvania were financially embarrassed by it, and were unable to pay the interest on the bonds issued to them.

The question of paying these bonds became the all absorbing one in Pittsburg in 1857. Pittsburg, or rather a majority of its people, favored the payment of its railroad bonds, but the county was strongly in favor of repudiation. There was no politics in it at all; it was simply an uprising of the people. Among the repudiators, the leader was probably Thomas Williams, a lawyer of high standing, who was shortly after that elected to congress. It became necessary about this time for the county to collect eight mills on the dollar on all property as then valued, to pay the interest on the bonds and to provide for the sinking fund to redeem them. Williams was a bold, courageous man, who did not fear to espouse any cause which he thought a just one. He came out squarely for repudiation, and opposed the tax-levy necessary to pay the interest. A convention was called. Williams was the chief advocate before the convention. In his address he stated, and we believe that it was not denied, that the county indebtedness amounted to eight million of dollars, and that of this sum five and a half millions were incurred in railroad construction. He demonstrated that the railroads should pay the interest on the bonds and could not do it, and therefore the county was expected to pay it. He alleged fraud on the part of the companies in procuring the subscriptions, and that the bonds were not sold at par, but in some instances as low as 75 cents on the dollar. The law provided that they should not be sold for less than par, but it was evaded by purchasing iron and other railroad equipments at a higher price than the market price, and paying for them in bonds. For a long time this convention was known as the County Tax Convention. Another still larger anti-tax convention was held in Pittsburg in the early part of 1859. Thomas Farley presided, and men like J. W. F. White, Thomas Mellon, R. B. Carnahan, etc., were appointed to draw resolutions. Again Mr. Williams, by request, made the leading address. His address was one of great strength. The movement had spread, he said, to all parts of the country. Much of his time was consumed in showing the great influence of railroads over legislatures and even over the supreme court. He was very severe on all with whom he came in contact, but had bottled up his wrath for years apparently for this effort against railroads. It fell heavily on the railroads, for at that time there were many new ones being projected and built, and the speech went to all parts of the state. The audience was with him in every proposition, and manifested their approval by the heartiest applause, and when, after talking about two hours, he closed his address, he was given three cheers. Others spoke in the same line, but none were so potent, so bitter, nor so popular as Mr. Williams. Resolutions were then offered opposing the payment of the bonds, or any interest on them, and denouncing the action of the supreme court in certain manda-

mus proceedings. The resolutions requested the county commissioners not to levy a tax for the payment of the bonds, or the interest on them, and pledged them the support of the convention in their refusal to do so. They also thanked Mr. Williams for his defense of the rights of the people. The convention denounced newspapers for opposing the repudiationists, and also favored a repudiation of the canal debt if the railroads were permitted to evade the payment of the tonnage tax. It was one of the strongest conventions ever held in the county. In explanation of the mandamus, it may be said that writs of mandamus had been served on the city councilmen, forty-eight of them, to appear before the supreme court to show cause why absolute mandamus should not issue. The convention advised the councilmen to disobey these writs. The tonnage tax was a tax paid by the railroad company to the state, based on the amount of freight hauled by the company. It originated from the fact that the state owned the canal, and that if the railroad were built parallel with the canal, the canal stock held by the state would be depreciated if not worthless. To reimburse the state for this, the railroad company, in order to secure its charter, promised to pay the tonnage tax. But by this time it had dawned on the people, as they thought, that the company only added the amount of the tonnage tax to the freight, and that the shipper was in the end paying both the freight and the tonnage tax. During this period the railroad was very unpopular. It was not infrequent that business men of the city, who were struggling for the patronage of the community, advertised through the newspapers that they were not the holders of any railway bonds or stocks, lest their customers might not patronize them because of such ownership. Repudiation of these bonds was advocated by all the Pittsburg papers, save by the *Pittsburg Post*.

The railroad indebtedness of the county and the cities was by this time enormous. In 1860 Allegheny City owed the railroads on her subscriptions $400,000, though the assessed value of all city property was only three millions of dollars. Allegheny county then owed $2,300,000, with an assessed valuation outside of Pittsburg and Allegheny of twelve and a half millions. Pittsburg owed the railroads $1,800,000, with a valuation of ten and a half millions. It will thus be seen that the railroad indebtedness alone was more than the one-sixth of the total valuation. Suits were brought to recover the interest due on the bonds, and the decision went against the defendant. Mass meetings were held denouncing the decision of the court. The commissioners of the county, backed by public opinion, had refused to levy a tax to pay the interest on the bonds, and their course in this was highly praised by resolutions adopted by the mass meetings. The interest had so increased that a levy of over seven mills on the dollar was required because of this railroad debt. The two cities then owed over $130,000 interest on the railway indebtedness. The supreme court decided that it must be paid. The county commissioners were Messrs. Patterson, Brauff and Hamilton. They refused to levy a tax, even when directed to do so by the supreme court, and in this were upheld by the people

generally. They were promptly put to jail for this contempt. Late in 1860 a mass meeting passed resolutions again denouncing the supreme court in the most bitter terms. The resolutions asked for the removal of the entire bench because "they had disgraced their position." The commissioners had each been fined $1,000 and sentenced to jail until the fine was paid. They were put in jail on March 6, 1860. Two of them remained there till May, 1861, when the fines were paid by the county.

For a time both the city and county repudiated all responsibility for their payments. Afterwards, when business revived, a compromise was made with the holders of the bonds, and new ones bearing lower rates of interest were issued. The Pennsylvania railroad assumed and paid the million dollars subscribed by the county upon the surrender of the stock issued to it. The other subscriptions, without an exception were lost, but the roads have since added untold wealth to the city and county. The burden was very heavy even while the roads were being constructed, and became almost unbearable before they began to add to the city's commerce. Had it not been for the panic of 1857, there probably would have been no trouble, not even a sentiment favoring a temporary repudiation. Many counties and municipalities issued bonds to railroad companies in the manner described, and nearly all of them passed through the same difficulty that Pittsburg, Allegheny and Allegheny county encountered.

CHAPTER XII.

The Beginning of the Civil War.

The difficulties which brought about the Civil war in 1861 are still remembered, and the reader need not more than casually glance at them. The immediate cause of the war was the secession of the Southern States from the Union, which almost immediately followed the election of Abraham Lincoln to the presidency in November, 1860. Preceding this was a long and bitter contest on the question of African slavery, which had been bubbling up and bursting forth at the surface for more than thirty years. The Southern States erroneously regarded the election of Mr. Lincoln as a warning to them that their power in Congress and in the Union was drawing to a close. Lincoln was neither widely nor truly known in any section of the United States, and in the campaign which preceded his election, he had been represented in the Southern States to be a man of ordinary intellect. His election was made possible by the northern abolitionists, and the South was led to believe that he would be but plastic matter in their hands, and that his administration would be notable mainly for its unjust discrimination against them. They thought also that the prime object of the administration would be the abolition of slavery, an institution without which they thought the Southern States could neither advance nor hold their own in the commerce of the world. They were wrong in every particular as has been abundantly proven by later events. There is no doubt now but that the prime object of his official life was to save the Union, "either with or without slavery." In reality but few rulers in the world's history have surpassed him in ruling with an iron hand when heroic ruling was necessary, and perhaps none have equalled him in leniency, forebearance and charity, when the exercise of these qualities would not injure the cause most dear to him, viz.: the preservation of the Union. Nor is there any doubt now, even in the minds of the southern people, but that, had they remained in the Union as loyal states, Lincoln would have died a martyr to their cause rather than have had an injustice done them. They unjustly condemned him without a trial. In this they erred most grievously, and suffered most bitterly for it in the end.

A few words concerning the administration which preceded the Civil war may be necessary here. No one now doubts the loyalty nor the honesty of James Buchanan as president of the United States, yet the closing months of his administration were remarkable mainly for their intensely southern tendencies, and for the weakness which he displayed at the hands of the uprising South. John Floyd had been secretary of war while Jeremiah S. Black was attorney general in his cabinet, but an investigation made by congress into the affairs of the nation, had disclosed certain irregularities which impelled Floyd to resign his position. Black was then made secretary of state, and Edwin M. Stanton, of Pittsburg, was appointed attorney general. While Floyd remained in the cabinet he and his southern friends pursued a policy which greatly favored the Southern States in their secession movements, and brought a discredit on the president from which his memory has scarcely recovered even to this day. Buchanan was a truly great man, and had he been elected to the presidency in 1844, 1848, or even in 1852, he being a candidate for the nomination before the convention of each of those years, he might have left behind him not only a successful but a popular administration. But when he was finally elevated to the presidency he had been weakened by advancing years, and could not withstand the influences brought against him by the southern element which surrounded him. He was accordingly ground between the upper and the nether millstones of the day, between the slavery of the past and the freedom of the future, and has left behind him a memory that is somewhat unjustly clouded by his reputed lack of strength and by his leaning toward the Southern States.

The campaign of 1860 was an exciting one in every way. The wide-awakes were marching the streets of nearly every northern town and Pittsburg, in preparing to give its marvelous majority for Lincoln, shared in the enthusiasm of the day. In August, 1860, the Chicago Zouaves, drilled by Colonel Ehner Ellsworth, visited Pittsburg, and after being escorted through the city by the military companies of that day, they gave an exhibition drill at the fair grounds. They had drilled in the wigwam before the national delegates, who had assembled in Chicago to nominate candidates of the Republican party for the presidency and vice-presidency. The reputation of Ellsworth's Zouaves for fancy drilling had, therefore, preceded him to Pittsburg, and indeed, to every part of the Union, but the precision and beauty of their movements surpassed all expectation. The Duquesne Grays, through Captain R. B. Roberts, presented Ellsworth with a splendid sword. This and many other similar incidents served to fire the spirit of the Pittsburg people. There had been considerable newspaper talk about a dissolution of the Union, but there were few indeed who took it seriously. The *Dispatch* on November 7, 1860, said, "And now that the people have decided that Abraham Lincoln shall be our next president, let the insane howling about dissolving the Union of these states, cease forever."

In one sense it may be said that the war began here and this feature we will consider first. It will be remembered by the reader that in Lawrenceburg

the United States government had been for many years maintaining an arsenal. This was on the Allegheny less than two miles from the fork. On December 24, 1860, word was spread abroad over the cities that an order had been issued for conveying seven hundred tons of cannon, arms and military accoutrements then in the Pittsburg arsenal to New Orleans. This coming when the whole country was complaining about the southern affiliations of Buchanan's administration, aroused the people of Pittsburg and the surrounding cities, and indeed all of Western Pennsylvania, to the highest pitch of excitement. The day following, December 25, a meeting was called at the comptroller's office. By this meeting a committee was appointed to visit the officers of the arsenal at once and if possible, to prevent the execution of the order until communications could be had with the military authorities in Washington. Already, however, the steamer, the "Silver Wave," was moored at the wharf of the arsenal to receive the armament in pursuance of the order. There were in the arsenal many stands of small arms and an abundant supply of all kinds of ammunition and military equipments. There were also about 100 ten-inch cannon, generally known as "128 pounders," and a very large 12-inch gun was about to be cast at the Fort Pitt foundry. The orders from the secretary of war for shipment included many of the smaller arms, etc., and seventy-eight of the ten-inch guns. The commandant of the arsenal, Major John Symington, refused to give any information about the orders he had received. He was from Maryland and this was regarded as conclusive evidence of his disloyalty to the Northern states. Regardless of what his sentiments may have been he had but one duty to perform and that was to obey orders. This he was holding himself ready to do. Upwards of fifty of the leading citizens of Pittsburg signed a petition to the mayor asking him to call a meeting of the citizens of the vicinity. The petition stated that the object of the meeting was:

"For the purpose of expressing their opinions upon the act of the War Department in ordering the available ordnance in the arsenal at this city to be forwarded to southern ports, also to take such action in the premises, either by memorializing the President on the subject, or otherwise, as the exigencies seem to require."

The meeting was promptly called and on December 27 was convened one of the largest assemblages ever held in Pittsburg. Various methods, some of them more or less revolutionary in themselves, were proposed, but a better judgment prevailed. A series of resolutions, mild indeed considering the general excitement of the people, was passed. They, in brief, set forth the surprise and indignation of the people when they learned that the ordnance of the arsenal were to be removed to a city where they were not needed and where they could easily be seized and appropriated by a people who were not only threatening rebellion, but many of whom were already in actual revolt against the government of the United States; that, the proceeding in its effect disarmed the friends of the government and strengthened its most hot-headed enemies.

They expressed their confidence in the ability of the government to sustain the constitution and laws, but were opposed to any unwarranted interference by the people in this shipment, and that by such interference they would manifest the same want of respect for the laws that were then being manifested in the southern states; they regretted the condition of affairs which had shaken the confidence of the people in the just administration of the government at Washington. They closed by suggesting that the president of the United States should dismiss from his cabinet all who were aiding those in rebellion and that he, as a citizen of Pennsylvania, should see that no injury was done to the republic while he remained president. The resolutions were much milder than the popular feeling would seemingly warrant, for on all hands were men who favored an armed resistance should the government insist on executing the order of shipment. "Is it not enough," said the *Dispatch* of December 25, that we are to be sold out to the secessionists,—the administration would bind us hand and foot, deprive us of arms, and deliver us neck and heels to the traitors who would destroy the Union! It has already ordered one hundred and twenty-four heavy guns from our Allegheny arsenal to the far South,—not to defend the stars and stripes, for which our skillful mechanics made them, but to batter it down under the pirate flag of some Lone Star or Rattlesnake government. * * * Will our people submit to this? Our citizens, of all parties, as a unit, denounce the movement as treason, and have telegraphed to Washington to have the order revoked. If it is not done, we owe a duty to the nation, to the state of Pennsylvania, and to ourselves, to prevent—by force, if necessary—the transfer of these munitions of war, under color of law, to the enemies of the nation." Another meeting was held on December 30 and while it was yet in session, a body of troops marched from the arsenal guarding a train of guns that were to be taken to the wharf for shipment on the "Silver Wave." The popular feeling mounted to the highest pitch of excitement and many advocated placing cannon on the opposite side of the Allegheny river, near Brunot's Island, to sink the boat if an attempt was made to convey the precious freight down the river. Then the more influential citizens of Pittsburg intervened and succeeded in holding the train long enough to further communicate with Washington and if possible to have the removing order countermanded. During all these days messages had been passing back and forth between Pittsburg and Washington with a view to securing this countermand. Edwin M. Stanton, as we have said, was attorney-general in Buchanan's cabinet and was relied on greatly to secure the desired order. Finally a message was received from him which, while it did not promise that the order should be countermanded, it held out such hopes to that end that the committee appointed by the meeting on the 30th were enabled to put forth a statement which greatly allayed the popular excitement in Pittsburg and prevented the more rash element of the cities from committing acts of violence. The cannon were nevertheless removed from the arsenal to the wharf and some of them were actually placed on board the steamer. Then their further removal tem-

porarily ceased and on January 2 the countermanding order reached Pittsburg. This was more than three months before Fort Sumter was fired on and may very properly be called the beginning of the rebellion, for it was the first decided action anywhere in the northern states against the uprising of the South. Purer patriotism was not displayed at the meetings in Faneuil Hall in the days of the Revolution, than the men of Pittsburg showed in this movement. Their loyalty to the government in this emergency but presaged the prominent part they were to take in the great war which was soon to follow.

Another reason, perhaps the strongest of all why the order was countermanded, has but seldom found its way into print. Floyd, as a matter of course, cared little for the protests of the Pittsburg people. Standing on the brink of secession, his main object was to strengthen the South and it mattered little to him what effect his action had on the standing of Buchanan's administration. His purpose was to strip the North and arm the South in every way before the fourth of March. There is probably nothing which he desired more, so far as it went, than an armed resistance to the order, in the loyal city of Pittsburg. In all probability he was pleased beyond expression, rather than frightened by the threatened rebellion in a great northern city. All the South would have gloried over it, could they but have said that Pittsburg was first in the Union to set at defiance the order of the war department. In our opinion the truth of the situation lies in the fact that President Buchanan had at that time living in Pittsburg, near the arsenal, a cousin named J. S. Speer, a physician of great skill and reputation. The president was well acquainted with him and had great confidence in his judgment. Seeing the great danger approaching, realizing the baneful result of an open war between the national authorities and the citizens of Pittsburg, and perhaps deploring the bloodshed which might follow, he wrote to President Buchanan and laid the truth plainly before him. He told him of the feeling in Pittsburg and made him realize the needless danger the government was incurring. Floyd and all his fellow conspirators had every reason for concealing the truth from Buchanan. The latter may have been weak in the hands of designing men, but he had no desire to incur the hatred of the North and particularly of Pennsylvania. The very day that Dr. Speer's letter was due in Washington, Floyd was induced by some means, to countermand the order. The big guns were thereupon taken back to the arsenal amid shouts of joy and taunting epithets from the triumphant people of Pittsburg. Even if there is but little doubt that it was Dr. Speer's letter which directly brought about the countermand, it was the patriotic sentiment of Pittsburg as manifested by their threats of open resistance, that induced the thoughtful, unassuming physician, who was interested in the good name of the president, to lay the truth plainly before him.

The first administrative duty of President Lincoln was therefore to call for volunteers to defend the rightful authority of the government against those who sought to destroy it. In answer to his call for troops from every northern state came the same enthusiastic response. Political differences which

but a few months before had apparently widely and hopelessly divided the North in a most virulent contest were now forgotten in a common effort to sustain the Union as represented by the administration of President Lincoln. Such an uprising of a people had never before been witnessed. Soldiers came from every walk and calling in life. From the office, counting house, the factory, the work bench, and from the green fields they came, asking only to be led where duty called and danger answered. One hundred citizens were appointed as a committee of public safety, and of this committee William Wilkins, upon whom the nation had showered her honors with a lavish hand, was made chairman. The work of enlisting men began at once. Two days later, April 17, the "Turner Rifles," under Captain Amlung, left Pittsburg for the state capitol, and in less than a fortnight two thousand men from Allegheny county were enlisted in the war for the Union.

The state capitol of Harrisburg, then little more than a country town, suddenly found itself a military depot of stupendous proportions, a camping ground for soldiers from all parts of the state. As the troops arrived they were organized, drilled and sent to the front, each regiment being designated by a number which marked the order of its organization.

On April 12, 1861, news of the assault on Fort Sumter reached Pittsburg. Here, as elsewhere throughout the northern states, the attack created great excitement. At the leading theatre in Pittsburg that night the play was suspended by the managers long enough to read the telegram stating that the forces in Fort Sumter were bravely returning the fire of the enemy. The outburst of applause and excitement was so great that the managers found extreme difficulty in quieting the audience so as to allow the play to proceed. The mayor was urged to call a public meeting for the evening of March 15. The situation in the South was the engrossing subject of thought and conversation in Pittsburg and the surrounding cities. All other interests were forgotten or set aside and on the 14th and 15th military companies from all sections of the county began to tender their services to the government through the authorities at Pittsburg. No meeting held in Pittsburg prior to that time had evinced the enthusiasm of the meeting of April 15. The city hall was crowded to overflowing. Addresses were made and flaming resolutions were adopted. One clause represented the present to be "a fit occasion to renew our obligations of untiring fealty to that government and that Union which we have been taught to regard and revere as the palladium of our liberties at home and our honor abroad; and in their defense and support, by whomsoever assailed, we will endeavor to prove ourselves worthy sons of patriotic sires." Bands were playing, eloquent addresses were made and almost every citizen seemed anxious to surpass his neighbor in his loyalty to the government of the North. General Negley was then at the head of the military forces of the cities and on the 17th of April received orders to forward two regiments to Washington. The first detachment actually started that same evening and the others followed almost immediately.

It was thought best by the leading citizens that a committee of public safety should be appointed. This committee consisted of one hundred and fifty of Pittsburg's strongest and most active men and they met to organize on April 18. Sub-committees were appointed and all began to work in harmony in a field in which they proved themselves to be eminently useful. A relief committee was also appointed covering the wards of both Pittsburg and Allegheny. Their principal work was to look after and supply the families of those who had gone to war and furnish them with anything they stood in need of. None were more enthusiastic in the cause than the women of the cities, as indeed women have always been in all wars. On April 22 they addressed the following letter to William F. Johnson, ex-governor of Pennsylvania, who was then a resident of Pittsburg and was acting chairman of the executive committee of public safety:

"Dear Sir: The undersigned tender to your committee their services in making bandages, supply lint and nursing the sick of the volunteers of Pennsylvania and other states. We are willing to go where and when called on. Our neighbors, relatives and friends are in the ranks, and we are anxious to be useful, as far as we can, to serve the cause of our country and humanity."

This letter was signed by about one hundred and fifty women who were prominent in social life and who were active in doing such work in the city as is usually performed by them. Their services were accepted and the example set by them was followed in many other sections, for the newspapers gave a wide publicity to the patriotic offer of the Pittsburg women.

Lincoln's first call for troops was for 75,000 men, and in a few days word was received that Pittsburg's quota was filled and that no more could be enlisted under that call, yet thousands in Western Pennsylvania were pressing forward anxious for enlistment. The first call was for three month soldiers, and this county sent twenty-four companies, namely, one in the Third regiment, three in the Fifth, five in the Seventh, six in the Twelfth, eight in the Thirteenth, and one in the Fourteenth. The Seventh Regiment was the only one which during the three months enlistment was permitted to engage in any actual conflict. On June 25, 1861, they were attacked by a regiment of cavalry but it was promptly driven back with a loss of six men and three horses. On July 2 the Seventh Regiment crossed the Potomac and reached Martinsburg, where they captured a quantity of flour and seized and destroyed one hundred and fifty barrels of whiskey. A small detachment afterward captured three of the enemy's pickets. Most of the time of their enlistment was consumed in drilling, doing guard and picket duty, etc. This, to the enthusiastic young man, was much more irksome than active service would have been, for their great desire was for actual battle with the enemy. The drilling, however, stood them in good stead, for many of them re-enlisted at once after the expiration of their term of three months, and there were but few of them who did not perform abundant service in the years of war which followed.

Pittsburg and Allegheny, aside from their soldiers in the field, soon assumed a very important position in the conduct of the war. Its location at the head of navigation on the Ohio river and the railroads which centered here brought it into great prominence. Nearly all of the troops going east or west from one division of the army to another, or going to the eastern army in their first enlistment, or returning in broken ranks when their service was ended, passed through Pittsburg. The cities took it upon themselves to supply these soldiers, going either way, with all they could eat, at least. In the summer of 1861 a regiment came from the West which was inadvertently neglected by the city and afterward its soldiers complained that they were hungry and had passed through Pittsburg without being able to procure provisions. This was very greatly lamented by the public-spirited people, and they determined that there should be no repetition of the affair. The result was the appointment of a subsistence committee and its main duty was to furnish meals to the troops as they passed through, going either way. The railroad companies communicated promptly with the committee of the approach of a body of troops and the committee was always ready for them. The first regiment supplied by the committee came in July, 1861, and from that time on until 1865 and 1866 refreshments in abundance were freely supplied to every body of troops which passed through the city, either way, whether the journey was made by night or by day. More than four hundred thousand full meals or midnight lunches were thus furnished by this committee. The expenses incurred in this laudable undertaking of supplying the wants of the defenders of the country were provided entirely by voluntary contributions. Confederate prisoners were also cared for. "If thine enemy hunger, feed him; if he thirst, give him drink."

The great manufacturing facilities of Pittsburg were also brought into requisition in the interests of the government, for they were almost at once able to change their factories so as to be able to make furnishings and supplies such as were needed by the armies. Cannon, armor plates, shot, shell, saddles, harness, wagons, gun carriages, caissons, clothing, and all kinds of military accoutrements and munitions of war were manufactured here in Pittsburg on a very extensive scale. The public mills and factories for a period of four years assumed somewhat the appearance of an extensive arsenal, much more so than that of factories of general material of commerce. This condition of the city and the daily passage of armed soldiers through its streets gave it also more nearly the appearance of a military city than that of any other city in the Union save Washington.

The first real battle of the war, the first battle of Bull Run, as every one knows, resulted adversely to the Union troops, and here in Pittsburg as in every part of the North caused great excitement. It aroused the people to the fact that they had a contest of great magnitude before them; that the rebellion was a grim visaged war which could not be put down in a few months; that those who went to the front went to a contest with foemen worthy of their steel before whom they might probably be compelled to lay down their lives in

order to maintain the Union. The defeat at Bull Run was probably a blessing in disguise, for it fired the patriotic spirit of the people, and made them more willing than before to sacrifice their personal interests in defense of the Union. At a meeting of the committee of public safety of Pittsburg an organization known as the Home Guards was thought to be advisable, and accordingly a special committee to effect it was appointed. Within three weeks sixty-four companies with an average of seventy troops to each company was enlisted in these Home Guards. The president of the Bank of Pittsburg at that time was the renowned John Harper, a man who, though old in years, was unusually strong in the hearts of the people, and who stood at the head of the financial interests of the city. By his efforts the banks of Pittsburg contributed a fund sufficiently large to purchase arms and equip these sixty-four companies. At first the Home Guards were derisively called "Stay-at-home-soldiers," but they proved themselves to be ready and willing for the severe conflicts of the war which followed. From their first enlistment they were drilled almost nightly in the manual of arms. In a short time they were, therefore, able to contribute reasonably well drilled men very largely from their ranks to the companies and regiments which were from time to time raised in and near Pittsburg. They not only furnished troops but lieutenants, captains and regimental commanders came from their ranks. In this way the Home Guards became a most efficient military school, in which the young men of Pittsburg were educated for the stormier fields of the war, and this was doubtless the intention of the far-seeing men who originated the scheme at the beginning of the war.

CHAPTER XIII.

Civil War Continued—Regiments Sent to the Front.

The Eleventh Regiment was one of the most noted in the Civil war, but had only one company from Allegheny county. It was commanded by Colonel, afterwards General Richard Coulter, of Westmoreland county, and entered the service on April 26, 1861. It was enlisted for a three-months service only, but at the close of that time was recruited and mustered into a three-years' service. During the three months' service it had participated in the battle of Falling Waters, and the soldiers had nobly demeaned themselves. On the re-enlistment came a dispute as to the numeral it should take. If numbered at the time of this re-enlistment it would have been the Fifty-first Regiment, but the officers and men were proud of the early enlistment as indicated by being the Eleventh Regiment, and were anxious to retain it. The dispute became serious, and was finally carried to the governor of the state, Andrew G. Curtin, who settled it by the following highly complementary order dated Harrisburg, October 26, 1861: "The Regiment of Pennsylvania Volunteers commanded by Colonel Coulter will continue to be known as the Eleventh Regiment, Pennsylvania Volunteers. It is just to the officers and men that the regiment should have future opportunities of displaying the courage and gallantry of Falling Waters, which is now a part of the military history of the state, under their original designation." The regiment left Harrisburg on November 27, for Baltimore, and reported to General John A. Dix. Their first duty was to guard railroads and other property near Annapolis, Maryland, and there they remained until April, 1862, when they were removed to Manassas Gap. In the summer of 1862, the regiment was placed under General Pope, and participated in the battles of Cedar Mountain, Rappahannock Station, Thoroughfare Gap, Second Bull Run, Chantilly, South Mountain and Antietam. It was afterwards with the Army of the Potomac in the battles of Fredericksburg, Chancellorsville, Gettysburg, Mine Run, the Wilderness, Spottsylvania, Cold Harbor, Petersburg, Five Forks, etc., and was at the surrender at Appomattox. On January 1, 1864, its second enlistment having expired, they enlisted again as a veteran regiment, and rapidly recruited its wasted force, for by this time it had earned almost national reputation, and the soldiers were anxious to enlist with it. When it went out in November, 1861, it had

about 700 men on its lists. Counting all who were, from the beginning to the end of the war, borne on its rolls, its number aggregated 1,890, showing that about 1,100 were added as recruits. When it was discharged on July 6, 1865, at the close of the war, it had only 332 men, showing that nearly 1,600 were killed, lost in battle, discharged, etc. It was, at the close of the war, the oldest regiment in this service from Pennsylvania.

The Twenty-eighth Regiment was uniformed and equipped at the private expense of Colonel John W. Geary, who was afterwards governor of Pennsylvania. It had three companies from Allegheny county. Geary was a very popular man, who had seen service in the Mexican war, and had afterwards been active on the Pacific coast, and in the building up of the new and popular city of San Francisco. Many soldiers were anxious to enlist with him, and from the surplus troops that offered themselves, Knapp's Battery was formed. The Twenty-eighth Regiment entered the service in August, 1861, and was sent at once to Harper's Ferry, where it was more or less engaged, though in minor actions, during the late summer and fall. In October it participated in the more serious engagements at Bolivar Heights, and still later was engaged in the celebrated battle of Balls Bluffs, where the brave General Edward D. Baker was sacrificed, and at Noland Ferry. In the winter of 1861 and 1862, they skirmished more or less with the enemy, but there were no serious engagements. In March, 1862, the regiment was sent against the strongly entrenched forces at London Heights, and at Leesburg. There the enemy was dislodged from its place, and the Twenty-eighth Regiment remained at Leesburg until July, 1862. They bore an active share generally in the operations of the army in Virginia. They were with General Pope in his severe campaign and were in the battle of Antietam under George B. McClellan. They were at the battles of Fredericksburg and Chancellorsville, and at Gettysburg in July, 1863. In the fall of 1863, they were with other regiments transferred to the Army of the Cumberland, and in the campaign of the West and South, and afterwards in the historic march from Atlanta to the sea, the regiment saw a great deal of active service. During the four years of its service the losses of the Twenty-eighth Regiment were equal to its original muster. It had served in twelve different states, and had taken part in more battles and skirmishes than almost any other regiment in the service of the United States.

The Reserve Regiments, known generally as the Pennsylvania Reserves, were raised in our state by virtue of a special act of assembly, which authorized them. There were fifteen of them numbered consecutively. The purpose of the organization was that they should be used entirely in defense of the southern border of Pennsylvania, which lay close to the main army of the South. But when the war became more serious, and when all the soldiers which the North could conveniently furnish were needed, they were called to the main army being of more use there than they were in Pennsylvania. They were, therefore, regularly mustered into the United States service as Pennsyl-

vania Volunteers, but they also retained their old numbers which designated them as Reserves or Reserve Regiments. The Thirty-seventh Regiment, Eighth Reserve, had three companies from Allegheny county, and were sent to Washington in July, 1861. The regiment went into camp at Tennallytown, where it remained until October, at which time it was ordered to Langley, Virginia, where it established winter quarters. In 1862, it was attached to the army of General McClellan, and took part in the celebrated Peninsular Campaign. It was in the battle of Mechanicsville, Gaines' Mills, White Oak Swamp, and in a number of minor engagements. In August, 1862, it was ordered to join the army of General Pope, and accordingly took part in the second Bull Run campaign and battle. Following this it was in the Maryland campaign, and on September 14, was in the most severe part of the battle of South Mountain, and on September 17, it participated in the battle of Antietam. Its next severe engagement was at the battle of Fredericksburg, where it sustained heavy losses. In February, 1863, the defense of the capitol at Washington had become a serious matter, for the southern army was daily forcing itself closer to the seat of government. The Thirty-seventh Regiment was, therefore, with others, ordered to Washington for that purpose, and there it remained until the spring of 1864. In April it started for the Wilderness campaign, where it arrived on May 4. It took part in the campaign and was also in the battle of Spottsylvania. Its term of enlistment expired on May 17, and it was released from further duty in that section. The veterans and recruits who desired to re-enlist, were mostly transferred to the One Hundred and Ninety-first Regiment, while the others came to Pennsylvania, where the regiment was mustered out of service on May 24.

The Thirty-eighth Regiment, Ninth Reserves, had in it eight companies, viz.: Companies A, B, C, D, E, G, I and K, all of which came from Allegheny county. It was organized on June 28, 1861. For about four weeks this regiment was drilled in Pittsburg, and left here for Washington on July 23, where it was mustered into the United States service on July 28. It was engaged in guard duty generally in Washington, until October 9, when it was moved over into Virginia, and established winter quarters at or near Langley. On November 9, a detachment was sent out to reconnoiter Hunter's Mills, and on December 20, the brigade to which the Thirty-eighth Regiment was attached went to Dranesville, where it participated in a spirited engagement. After this it returned to its quarters and remained there until the middle of March, when it broke camp, and after several marches and campaigns, embarked for the peninsula, where it arrived on June 19.

On the 26th it took part in the battle of Mechanicsburg, and afterwards was engaged at Gaines' Mills. For several days it bore an active part in the general fighting of that section. On August 16, the regiment was sent to the army of northern Virginia then commanded by General Pope. It landed at Aquia Creek, and met the enemy in a severe battle at Grovetown after making a forced march of five days. This was on August 29, and on the 31st it was

engaged at Chantilly. After a brief rest it went again to the front, and was engaged in the battle of South Mountain, and three days later, September 17, was in the battle of Antietam. It was also in the battle of Fredericksburg on December 12, and at each place performed its part nobly. Then the regiment was brought to Washington to be re-organized and recruited, and in June, 1863, it again entered actual service and was in the battle of Gettysburg, after which it joined the pursuit of General R. E. Lee's army, keeping a watch over him until he crossed the Potomac for the South. In the fall of 1863, and in the spring of 1864, the regiment rested and recruited, and before the battle of the Wilderness it was ordered to Washington. On the expiration of its term of service, it was ordered to Pittsburg, where it arrived on May 8, and was mustered out of the service on May 13.

Of the Forty-fourth Regiment, First Cavalry, a part only of Company K was recruited in Allegheny county, and joined the regiment in Washington in August, 1861. The regiment was organized as the Fifteenth of the Reserve Corps. The summer of 1861 was spent in drilling the regiment, and in November it entered on more active duties in scouting the country toward Dranesville, and part of it was in the battle at that place. When the spring campaign of 1862 opened up it was taken with the army toward Manassas. In May it entered the campaign then going on in the Shenandoah valley, where it was constantly engaged in scouting and skirmishing. Late in June it needed rest, and returned to Manassas where it recuperated two weeks. It then joined the advance army of General Pope, and took part in the operations which resulted in the second battle of Bull Run. In all these operations it performed the usual services of a cavalry regiment, by scouting and skirmishing, and pouncing down on a weak point in the line of the enemy whenever such could be discovered. During the campaign in Maryland, the regiment guarded the approaches to Washington, and sent out occasional detachments. On the close of the campaign it resumed active duty and continued it till the battle of Fredericksburg in which it participated. From there it was taken to Belle Main Landing, where it went into winter quarters. All winter the regiment did picket duty along the Rappahannock, and often sent out scouting parties. On April 12, 1863, the spring campaign having opened up, its active duties again began. In the winter of 1863-64 there was little rest for the cavalry, for that department was made most aggressive by sending raids into the enemy's lines and by sending out smaller scouting parties. The spring campaign of 1864 began in April, and from that time until the close of its term of service, the First Cavalry scarcely had a day's rest. Of the sixty-one days that elapsed after General Grant's grand campaign against Richmond began, fifty-four were spent by the cavalry in marching, scouting, picketing or fighting. It took part in a number of serious engagements, and lost heavily from its ranks. Its term of service expired in August, 1864. About four hundred went into the Second Provincial Cavalry, and the remainder were mustered out of the service at Philadelphia, on September 9.

Of the Forty-sixth Regiment, Companies B and F were recruited in Allegheny county, and it was organized on September 1, 1861. It was very soon placed under the command of General N. P. Banks on the Upper Potomac. The winter of 1861-62 was spent in drill and in camp duty, and early in the spring of 1862, they were sent to unite with the campaign in Shenandoah valley. Three companies of the regiment were engaged with the enemy near Kernstown. The entire regiment participated in the battle of Winchester, and they followed General Early's forces as they retreated from the valley. The next engagement was at the battle of Cedar Mountain, where they lost seventy in killed, wounded and prisoners. The regiment was also engaged at Antietam. It spent the winter of 1862-63 at Harper's Ferry, Fairfax Station, and Stafford Courthouse. In May it took part in the battle of Chancellorsville, and in that campaign had but four soldiers killed. In July it was in the battle of Gettysburg, but its loss was not great. In the fall of 1863 it was ordered with its corps to Tennessee, and there guarded the Nashville & Chattanooga railroad, which was attacked many times by guerrillas from the southern army. Many of the regiment re-enlisted in 1864, and were granted a veteran's furlough, after which they returned with their ranks well recruited. Early in May they entered General Sherman's campaign at Atlanta. The regiment participated in the battles of Dallas, Pine Knob, Kenesaw Mountain and Marietta, and in all these engagements its loss was but fourteen killed and thirty wounded. It was again in action at Peach Tree Creek, losing ten killed and twenty-two wounded, and in the last battle between Sherman and General Hood it had six killed and several wounded. It was with General Sherman on his march to the sea, which was reached on December 21. On its return North it was mustered out of service at Alexandria, Virginia, on July 6, 1865.

The Forty-ninth Regiment had but one company, Company K, which was recruited in Pittsburg. It was united with other companies on January 1, 1863, and became Company B. It was organized on September 14, 1861, and the day following went to Washington. There it remained until March 10, when it was moved towards Williamsburg, Virginia, and there engaged in battle with the enemy on May 4. It was also in action at Garnett's Hill and Golding's Farm on May 27 and 28, after which it was moved to Harrison's Landing and suffered greatly from sickness.. In August it joined Pope's retreat after the fighting was over, and early in September started on the Maryland campaign. It was in action at Crampton's Gap on September 14, and was present, though not engaged, at the battle of Antietam on September 17. It was also under fire at Fredericksburg but was not called on to perform severe services there. It was again in action near Fredericksburg early in May, 1863. It was under fire, but not closely engaged, at Gettysburg, though it afterwards participated in the pursuit of Lee's army. At Rappahannock Station the brigade of which it was a part, captured four guns and caissons, a pontoon, eight battle flags, two stands of arms and sixteen hundred prisoners. Part of the regiment re-enlisted and was granted a veteran's furlough, after which they returned with

recruits. In May, 1864, the regiment participated in the Wilderness campaign and was in battle May 4th and 5th. It was again engaged on the 9th when its loss was sixty-four killed. It was also in the battle of Spottsylvania Court House and sustained a heavy loss. Later it was in the battle of Cold Harbor and in the operations at Petersburg. Joining General Sheridan in his Shenandoah campaign, it was assigned an honorable part in the battle of Winchester. It returned to the trenches in front of Petersburg and spent the following winter at Fort Wadsworth. In April, 1865, it entered the last campaign and fought the last battle at Little Sailor's Creek, where it assisted in the capture of many of the enemy. It was finally mustered out of service on July 5, 1865.

In the Fifty-first Regiment, Companies C and E were partly recruited in Allegheny county. They moved from Camp Curtin at Harrisburg to Washington, on December 14, 1861, and there encamped during the winter. In February, 1862, they were united with the Army of the Potomac, and in March went to Fortress Monroe. In April they were removed to Yorktown where they were compelled to labor hard and encamped and slept in the mud. They were also engaged in one short sharp skirmish. In the early days of May following, they were removed to Williamsburg, but reached there too late for the battle, and on May 31st they were in the severe part of the battle of Fair Oaks, losing seven killed and forty-nine wounded. They were in action near Charles City Cross-roads, losing seven killed and fifty-six wounded. The day following they were in the noted battle of Malvern Hill. In August they joined the army of General Pope, which was then in Northern Virginia, and took part in the second battle of Bull Run and in the battle of Chantilly. Their next engagement was at Fredericksburg in which they lost twenty-one killed, seventy-six wounded and seventy-eight missing. Late in April, 1863, they left winter quarters and on May 3rd, were at Chancellorsville. They then received a month's rest after which they started for the Gettysburg campaign and took part in that battle and in the pursuit of General Lee's army. They were also at Auburn Creek on October 13th, at Kelly's Ford November 7th and at Locust Grove on November 12th. They went into winter quarters at Culpeper and in June, 1864, two-thirds of them re-enlisted, securing each a veteran furlough. They returned with the recruited ranks and in May were again in active operations. They encountered a severe engagement on May 4th in which they lost twenty-two killed and one hundred and twenty-eight wounded. They were afterward engaged in an action on the 12th but with smaller losses. From that time on, through the summer and autumn of 1864, they saw much severe service, being kept busy by marching, fighting, establishing new lines and erecting fortifications. In January, 1865, they were united with the Eighty-fourth Pennsylvania Regiment. In the early spring they began the final campaign of the war in which they took an active part even up to the surrender of Lee at Appomattox. They were mustered out of service at Alexandria, Virginia, on June 22, 1865.

The Sixtieth Regiment, Third Cavalry, had but one company, Company G, from Allegheny county. The regiment reached Washington in August,

1861, and was drilled during the ensuing fall and winter at Camp Marcy. In March, 1862, it was added to the army of General McClellan and bore a part in the Peninsular campaign, during which it did picket duty, skirmishing and fighting. In the Maryland campaign it did general cavalry work by protecting the flanks of the columns from attack by southern cavalry. They passed the winter of 1862-63 in the vicinity of Warrentown on the Rappahannock river. On March 16, it crossed the river at Kelly's Ford and scattered the forces of General Fitzhugh Lee and General J. E. B. Stuart. In April they were sent on a general raid through southern Virginia in the course of which they destroyed much property and greatly weakened the enemy. It was also at the front when Lee invaded Pennsylvania in 1863 and at Gettysburg had a close-range hand-to-hand fight with the southern cavalry. It afterward somewhat harrassed Lee's army in its retreat from Pennsylvania. The remainder of the summer it was kept constantly on smaller expeditions and was engaged in several small but severe battles. In December, they encamped for winter quarters near Warrenton, Virginia and were made to perform much difficult service. They had an opportunity for re-enlistment during the winter but were badly used up with hard service and only seventy-five of them were willing to remain longer. In May, the regiment entered the Wilderness campaign and performed active duty. Their original term of service expired in July and the regiment was separated, one part going to Philadelphia, where it was mustered out in August, and the other part remaining to do active service the following summer and fall. In May, 1865, it went to Richmond and performed provost duty.

The Sixty-second Regiment, Colonel Samuel W. Black and J. B. Sweitzer, was first known as the Thirty-third Independent Regiment and afterward became the Sixty-second Pennsylvania Volunteers. Seven of its companies, A, B, F, G, H, K and L were raised in Allegheny county. In August, 1861, the completed Regiment went to Washington where it encamped and was more thoroughly drilled. Later they were encamped for winter quarters at Minor's Hill, where they were placed under a severe discipline and drill which continued through the winter. On the 10th of March, 1862, the regiment was moved to Manassas, from which place they were moved to Alexandria, and from there were taken on board transports to Fortress Monroe. On the 3rd of April they were taken to Yorktown where the regiment was engaged in its first battle. On May 8, the regiment was moved up the York river and on the 27th was in the battle of Hanover Court House. A month was passed then on picket duty and they were also made to build bridges and roads. On June 26, the regiment was under fire at Beaver Dam Creek but the engagement was not a severe one. At Gaines' Mill they were in a hot engagement and the Colonel of the regiment, Samuel W. Black, was killed. The regiment was in the battle of Malvern Hill on the 31st and there suffered severely. Its total loss in the engagements on this Peninsular campaign was two hundred and ninety-eight killed, wounded and missing. About the middle of August the regiment left

the Peninsula and marched to Newport News where it was taken on transports to Aquia creek and was engaged in the second Bull Run campaign. It was but slightly engaged at Gainesville on the 27th. After this came the Maryland campaign and the regiment was in the battle of Antietam. Its next action was at Fredericksburg, though its loss in that battle was not heavy. It was also in the battle of Chancellorsville but was not closely engaged. Next it entered the Gettysburg campaign where it lost heavily in the battle and afterward took part in the many maneuvers of the army in the autumn of 1863, and went into winter quarters at Licking Run. With its ranks recruited the regiment left its winter quarters, in May, 1864, to enter the Wilderness Campaign. Its first engagement there was on May 5 and during the entire month of May was more or less heavily engaged. At the battle of Bethesda Church its losses were extremely heavy. On June 16, the regiment reached the front of Petersburg, and on the 18th, had a sharp battle near the Norfolk & Pittsburg railroad. It was also engaged on the 21st at the Jerusalem Plank Road but with a small loss. The regiment did picket and fatigue duty from that time until its term of service expired on July 3. In one month of this noted campaign the regiment lost one officer and twenty-eight men killed while it had eleven officers and two hundred and twenty-seven men wounded and one officer and thirty men missing. It left the front, for Pittsburg, on the 4th day of July and was mustered out of service on its arrival here.

Of the Sixty-third Regiment, under Colonels Alexander Hays and A. S M. Morgan, Companies A, B, D, E, H, I and K were recruited almost entirely in Allegheny county. The chief commander, Colonel Alexander Hays, had been graduated at West Point and had seen service in the Mexican war. The regiment went in detachments to Washington in the summer of 1861, and in October crossed the Potomac and encamped between Alexandria and Mt. Vernon, where it did picket duty for the ensuing winter. It was also while there, thoroughly instructed in the manual of arms, and as a result it performed splendid services and won renown in the war which followed. At the siege of Yorktown the regiment was located about two miles from the town, which proved to be a very unhealthful place, and many of them sickened and died. It reached Williamsburg on May 5, too late for the battle, but at Fair Oaks it was severely engaged and sustained heavy losses. At Charles City Cross Roads it fought gallantly and at Malvern Hill it was engaged, though not so prominently as at Fair Oaks. It went into camp at Harrison's Landing and from there they were ordered to support General Pope on the Rappahannock. At the second battle of Bull Run the regiment lost heavily but won great honor by its actions. Later it was in the battle of Chantilly, after which it was moved to the City of Washington to perform general defence duty there, and there it remained until the battle of Antietam. On December 13 the regiment was in the battle of Fredericksburg, where it won additional honors. It was also in the battle of Chancellorsville and lost in killed, wounded and missing 120 men. In June, 1863, the regiment started on the Gettysburg campaign through Penn-

sylvania, reaching Gettysburg on July 1. Though stationed close to the enemy it did not suffer a great loss in this battle, and joined in the pursuit of Lee's retreating army after the battle was ended. It then camped at Culpeper until the fall campaign opened, during which it fought at Auburn Mills, Kelly's Ford and at Locust Grove. It went into winter quarters at Brandy Station late in 1863, and during the ensuing winter was engaged in doing guard and picket duty. On May 3, 1864, it moved toward the Wilderness and was engaged there on the 5th and 6th, losing in two days, 186 men in killed and wounded. On May 7 it was also in the battle, but with smaller losses. It was engaged at North Anna and at Polecat river, from where it went to the front of Petersburg, reaching there about June 15. It was engaged in the operations at this place and was several times in battle with corresponding losses. Its term of enlistment having expired, the veteran troops were placed in other commands and on September 9 the remainder of the regiment, consisting of but three officers and sixty-four troops, was mustered out of service.

The Sixty-fourth Regiment, under Col. James H. Childs, Fourth Cavalry, was raised largely by David Campbell, of Pittsburg, who became its colonel. In it were three companies from Allegheny. It moved to Washington in September, 1861, and was there drilled during the winter which followed. In May, 1862, the regiment was placed under General McDowell on the Rappahannock and began picket and scout duty. It was divided into scouting parties which were sent out in small bodies as the occasion required. In the Peninsular campaign the regiment did gallant service. Cavalry moved much more rapidly than men on foot and were able, therefore, to greatly support the infantry, particularly after the first year of the war when the cavalry had been drilled thoroughly to perform such services. From the Peninsular campaign they went to Yorktown and thence to Washington shortly after the second battle of Bull Run. The regiment was in the Maryland campaign and was in the battle of Antietam, where Colonel Childs, of Pittsburg, was killed. In the fall of 1862 the regiment made some brilliant dashes but otherwise was not actually engaged, and late in 1862 went into winter quarters at Potomac Creek Station. Each month as the war progressed, the cavalry troops became more effectual in battle. In the Chancellorsville campaign the Fourth Cavalry with others, rendered valuable service in scouting, and guarding roads, and it was no less valuable in the Gettysburg campaign. It reached the field on July 2, and was in the battle on the 3rd, after which it joined the general pursuit of Lee's army. Many of them were captured in October and sent to southern prisons, where the mortality was very great. In the Wilderness campaign in the spring of 1864 the Fourth Cavalry did fully its share in the general work performed by the cavalry during the entire campaign. Still later it was sent to Lynchburg, Virginia, and was there mustered out of service July 1, 1865, when its Pittsburg soldiers returned home.

The Sixty-fifth Regiment, Fifth Cavalry, was first called the "Cameron Dragoons," it being named in honor of General Simon Cameron, who was sec-

retary of war in the first part of President Lincoln's administration. It had been raised in Philadelphia, but Companies L and M had been added to it and they came from Pittsburg. The regiment reached Washington in August, 1861, and in a few weeks began active duty. It at first scouted near the enemy's lines and then encamped at Alexandria, where it remained until May, 1862. It then moved with the army of General McClellan for the Peninsular campaign. Its duty was mostly scout duty and it kept its general headquarters at Williamsburg. There it performed regular cavalry duties until September, 1863, and was in several engagements during this time. On February 7, 1863, Companies L and M of Pittsburg, while on scout duty, encountered a much larger force of the enemy. They were almost surrounded but fought bravely and broke through the line with a loss of thirty-five killed, wounded and prisoners. In September the regiment went to North Carolina and was there engaged in similar duties. A detachment including Companies L and M went to Currituck Court House and drove from the country several small and troublesome bands of the enemy which had been extensively engaged in irregular warfare. In October the regiment went into winter quarters at Great Bridge, where many of them re-enlisted and received the usual veteran furlough. In November ten companies were sent to Portsmouth, after which the regiment was ordered to Yorktown and made an unsuccessful raid towards Richmond. Early in May, 1864, the regiment was more successfully engaged in a raid on the Petersburg and Weldon railroad, and on May 12 made another raid on the Richmond and Danville railroad and also on the South Side railroad. The regiment joined the forces of General Butler at City Point in June and made a number of important and successful raids. From July 15 until the close of September, the regiment was kept constantly in motion, often meeting the enemy and performing a great deal of severe picket duty. Early in October it took part in several severe actions near Richmond in which its losses were very great. Later in October and also on December 10 the regiment was severely engaged at Charles City Road, where it lost seven killed and fourteen wounded. It remained in the same vicinity, engaged mostly in picket duty until March 25, 1865, when it began its last campaign and was constantly engaged until the surrender at Appomattox, where it was finally mustered out on August 7, 1865.

The Sixty-seventh Regiment had in it one company, I, from Allegheny county, but most, if not all of its members, were mustered into service after Lee's surrender and they were mustered out on July 14, 1865.

The Seventy-fourth Regiment had in it two companies and a part of Companies B, I and K, from Allegheny county. It included many Germans who were then residents of Pittsburg. It was recruited in the summer of 1861, and in the spring of 1862 was sent to West Virginia, where it arrived after a severe march. It was engaged in picket and fatigue duty, after which it joined in the pursuit of "Stonewall" Jackson up the Shenandoah Valley. It was in a battle at Cross Keys, losing six men killed and thirteen wounded. Then it went to Middletown, where it remained a month, after which it was

moved to Cedar Mountain, but was too late for the battle at that place. It then accompanied the army toward Manassas and was in a sharp conflict at Freeman's Fork. On August 28 it reached Grovestown and was engaged in the second battle of Bull Run, having lost seventeen killed and wounded. It then went to the fortifications at Washington and remained there until after the battle of Antietam. From there it went to Fredericksburg but was too late in reaching that place to participate in the battle. At the battle of Chancellorsville in 1863, the Seventy-fourth was engaged and lost in all sixty-one soldiers. On the 12th of June it left its camp at Stafford Court House for the Gettysburg campaign. In this battle it lost in killed, wounded and missing one hundred and thirty-six men. Late in July it went to Warrenton Junction, and in August to Folly Island, South Carolina, where it remained on duty until August, 1864, assisting in the meantime in the capture of Charleston. It then returned to Washington, where it performed duty as a heavy artillery. Late in September it went to West Virginia, where it was engaged in guard and picket duty until its term of service expired. It was mustered out of service on August 29, 1865.

Of the Seventy-sixth Regiment only a part of Company K was raised in Allegheny. In the winter of 1861 and 1862 it was sent to South Carolina, where it did war service until May, 1864. It was in at the siege of Fort Wagner and in the attack lost fifty-three killed and thirty-four wounded. It then went to Virginia and participated in the movements there until December, 1864, when it was added to the forces moving against Fort Fisher. It then returned to North Carolina and remained there in general guard duty, etc., until July, 1865, when it was mustered out of service.

In the Seventy-seventh Regiment were three companies, B, D and E, which were almost entirely raised in Allegheny county. It was enlisted in October, 1861, and on October 18 was taken to Louisville, Kentucky. From there it marched to Nashville, Tennessee, reaching the latter place on March 2, 1862. It was first engaged in the battle of Shiloh, where it lost but three killed and seven wounded. It reached Corinth on May 28, and was engaged in a skirmish at that place. After Corinth had been abandoned by the army it went again to Nashville, reaching there early in September. It was then ordered to join an expedition to Louisville and returned and remained at Nashville until the opening of the winter campaign. In a reconnoissance near La Vergne it had a sharp skirmish with the enemy. On December 26 it, with the army to which it was attached, went toward Murfreesboro, and in the battle of Stone River, won from General Rosecrans, the honor of being the "banner regiment." After that it did guard, scout and foraging duty until February, 1863. It then moved into camp at Murfreesboro and was employed in building fortifications until the summer campaign began. On June 24 it broke camp and at Liberty Gap had a short engagement in which it lost nearly one-third of its men. After considerable marching it encountered the enemy again on September 19 at Chickamauga, and in this battle all of its field officers, seven line officers and

seventy men were taken prisoners. It then went to Whiteside, where it remained until 1863. In January, 1864, the greater part of the regiment re-enlisted and received a short veteran furlough. Early in May they returned and entered the Atlanta campaign. They were engaged at Rocky Face Ridge, Resaca, Kingston, New Hope, Kenesaw Mountain, Smyrna, Chattahoochee River and Peach Tree Creek. In the Atlanta campaign the regiment was busily employed. On August 25 it destroyed a part of the Montgomery railroad and aided in destroying the Macon railroad early in September. It was engaged at Jonesboro and at Lovejoy on September 3, 4, 5 and 6. After the battle at Atlanta, the regiment moved with its corps towards Nashville. On September 30 it met the enemy at Franklin and it later retreated to Nashville. On December 15 General Hood was attacked and the regiment took a prominent part in the action, after which they pursued the enemy as it retreated towards Huntsville, Alabama. It was re-enforced and re-organized in the spring of 1865, and in the summer was sent to Texas, arriving there on July 27. On December 5 it was ordered home, and on January 16, 1866, reached Philadelphia, where it was mustered out of service.

The Seventy-eighth Regiment, under Colonel Augustus B. Bannaffon, had in it Companies F, H and I from Pittsburg and was assigned with other companies to this regiment in March, 1865. The regiment was on duty at Marshall, Tennessee, and was with General Thomas' Army of the Cumberland in his campaign which drove the Southern army from Tennessee. It was mustered out of service on September 11, 1865.

The Eighty-fourth Regiment, Seventh Cavalry, had twelve companies in it, though but one of them came from Allegheny county. On December 19, 1861, it left for Louisville, Kentucky, and was encamped at Jeffersonville, where a month's drill was given them, after which it marched to Nashville, Tennessee. There it was separated into battalions and sent out in scouting parties through the country. They had engagements near Pulaski, at Lebanon, Sweeden's Cove, McMinnville and Readysville, and on July 13, 1862, were in the engagement at Murfreesboro. After that the battalions were mainly employed in protecting the flanks of the army from prowling bands of Southern calvary. On August 21, General Morgan and General Forest had combined their forces and in a contest with these the Seventh Cavalry lost forty killed and three hundred wounded and prisoners. In September the regiment was engaged in the battle of Perrysville, and in November the battalions were united and were taken again to Murfreesboro, where a severe battle was fought on December 31. A month after this the regiment was ordered with this brigade to march to Rover, where it broke up an outpost of the enemy and then scouted for two weeks within the enemy's lines. Again at Rover and at Unionville the Seventh was hotly engaged. It also met Morgan's forces at Snow Hill in April, 1863, had a skirmish with Duke's brigade on April 20, and assisted in taking McMinnville on May 6. It was engaged in battle at Murfreesboro on May 14 and contested with Morgan at Alexander on June 3. Late in June the regiment was closely

engaged in the battle of Shelbyville, where it was unsuccessful. On July 3 it fought at Elk River, on August 17 at Sparta, and in September joined the Chickamauga campaign, in which it performed splendid services. Early in 1864 a large part of the regiment re-enlisted and was given a veteran furlough. It returned with its ranks recruited and on April 3 entered the Atlanta campaign. It was engaged at Rome on May 15, at Dallas and Villa Rica Road on May 27, at Big Shanty on June 9, at McAfee's Cross Roads on June 11, at Monday Creek on June 20, at Kenesaw Mountain on June 27, at Augusta and Atlanta railroad on July 18, at Flat Rock on July 28, at Fairburn and Jonesboro on August 19, at Lovejoys Station on August 20, at Rome on October 12, and at Leech's Cross Roads two weeks later. It then went to Louisville, where it received new horses and equipments, and on March 22, 1865, it was attached to the command of General Wilson on an expedition and raid across the states bordering on the Gulf of Mexico. It was in an engagement at Plantersville, Alabama, on April 1, and later at Salem, where its losses were very heavy. It was also in action near Columbus on April 16, and on August 20 it reached Macon, Georgia, where it was mustered out of service on August 13.

The Eighty-second Regiment under Colonel David H. Williams had in it Company B from Allegheny county. It was organized in the fall of 1861 and went to Washington where it did defense duty for nearly six months. It was in March, 1862, moved toward Manassas and two weeks later went by steamer to Fortress Monroe. It moved to near Lee's Mills on Warwick's river, where it remained nearly a month. Then it went to Williamsburg, to the Chickahominy, to Seven Pines and to Fair Oaks Station. There it was attacked by the enemy and sustained a loss of eight killed and twenty-four wounded. On July 1 it was again in action at Malvern Hill. In August it embarked for Alexandria and was in the line of battle at Chantilly but was not closely engaged. It went on the Maryland campaign, crossed South Mountain the day after the battle, reached Antietam battlefield on the evening of September 17, and was under fire there the day following. It was in action on December 13 at Fredericksburg but its losses was not great. It was at the battle of Chancellorsville in May, 1863, and from there joined the Gettysburg campaign, but was but slightly engaged in that battle. It pursued the retreating army of Lee and had a slight skirmish at Frankstown on July 27 with a loss of eight men wounded. The winter quarters of the regiment were established at Brandy Station and there half its members re-enlisted and went home on veterans' furloughs. During the winter it was sent to Johnston's Island on Lake Erie to guard southern prisoners who were held there and returned in May, 1864, too late for the battles of the Wilderness and Spottsylvania. It was engaged at the battle of Cold Harbor, losing in killed, wounded and missing one hundred and seventy-three men. It was also in front of Petersburg and from there was ordered on to Washington to intercept General Early in his raid through Maryland. In September, its term of enlist-

ment having expired, it was ordered to Philadelphia, where on the 16th it was mustered out of service. The veterans and recruits whose time had not then expired, were put into the Eighty-second Regiment and participated in General Sheridan's Shenandoah Valley campaign, after which they returned to Petersburg. It was in the campaign in the spring of 1865, was in the battle of Sailor's Creek and was in the fore ranks when Lee surrendered at Appomattox on April 9.

The Eighty-third Regiment was raised in Erie in 1861, but in March, 1865, two companies from Allegheny county, G and H, were assigned to it. On March 29, they began the last campaign and were in engagements at Jones Farm, White Oak Road, Gravelly Run, Five Forks, Southerland Station, Jettersville and were in the pursuit at Appomattox Court House. It was mustered out at Washington June 28, 1865.

In the Eighty-seventh Regiment, Companies F and G were recruited in Allegheny county in February and March, 1865, and in March were placed in this regiment. It took part in the campaign of 1865 and on April 2nd was in the charge before Petersburg with a loss of thirty-three killed and wounded. It was also at Sailor's Creek where it had one man wounded. It was mustered out of service at Alexandria, Virginia, on June 29, 1865.

The One Hundred and First Regiment had Companies A, E, G and I, which were mostly raised in Allegheny county. It left Pittsburg, for Washington, on February 27, 1862. In March it was taken by transports to the Peninsula and on April 16th was sent to the front. It built corduroy roads at Yorktown, after which it went forward with the army. Its first engagement was at the battle of the Wilderness on May 5th and it was also at Fair Oaks on May 31st. After the Peninsular campaign was ended it was engaged in fatigue and guard duty until December, when it went to New Berne, North Carolina, and was in an engagement at Neuse river on December 14th. It was again in battle at Goldsboro on the 17th and then went into winter quarters at New Berne. In 1863 and the spring of 1864, the regiment was engaged in a general beating up of the country in various directions but was not in any battles. On April 17, 18, 19 and 20, 1864, a severe battle was fought at Plymouth and its loss was five killed, twenty-four wounded and two missing, while the remaining troops and officers were taken prisoners. They were marched to Tarboro and thence transported to Andersonville, Georgia, where the troops were kept till late in the summer, while some of the officers were sent to Millen and some to Savannah. Most of the officers were exchanged at Wilmington in the spring of 1865. Nearly one-half of all who were captured died in prison. The officers were sent first to Savannah, thence to Charleston and Charlotte. Many of the prisoners escaped, some of whom were recaptured, and those who lived through their imprisonment were exchanged in March, 1865. When the regiment was captured some were absent and some were sick, and these were afterward formed into a detachment to which recruits were added. They were finally mustered out of the service on June 25, 1865.

The One Hundred and Second Regiment was recruited in Pittsburg, mainly through the efforts of Colonel Thomas A. Rowley, who had been colonel of the Thirteenth Regiment during the three months' service, which had been mustered out on August 6, 1861. Later colonels were Joseph M. Kinkead, Jno. W. Patterson and James Patchell. The young men of Pittsburg enlisted very readily under Colonel Rowley and five companies were completed and left for Washington on August 21. Seven other companies followed, all from Allegheny county except Company H, which was partly raised in Butler county. The officers of the One Hundred and Second Regiment were: Colonel Thomas A. Rowley, Lieutenant-Colonel Joseph M. Kinkead and John Poland, major. The regiment was drilled thoroughly till March, 1862, when it took transports for the Peninsula. It was at Warwick Court House during the siege at Yorktown. On May 5th it was engaged in the battle of the Wilderness, its loss being three killed and thirty-eight wounded. It went afterward to Fair Oaks where it fought in that battle on May 30th, losing thirteen killed and forty-eight wounded, among the latter being Colonel Rowley. It was at Seven Pines on guard and picket duty and was in the battle of Malvern Hill where it lost ten killed and twenty-seven wounded, among the killed being Major Poland. On returning from the Peninsula it met the Union forces retreating from the second battle of Bull Run and aided in checking the pursuing enemy. It supported the batteries at Chantilly but was not actively engaged, and was held as a reserve at the battle of Antietam as well as at the battle of Fredericksburg, though it was under the fire of the artillery. On April 27, 1863, the regiment left its winter quarters and entered the Chancellorsville campaign. Colonel Rowley had been made a brigadier-general by this time and Lieutenant Kinkead had been made colonel, while Major John W. Patterson was made lieutenant-colonel and Adjutant Joseph Browne was made major. On May 3rd it was severely engaged at Chancellorsville and acquitted itself gallantly. Its loss was twelve killed, fifty-five wounded and about one hundred missing. Colonel Kinkead resigned soon after and Patterson succeeded him. William McIlwaine was made lieutenant-colonel and Captain Thomas McClelland was made major in place of Major Browne who resigned. Early in June the regiment left camp near Falmouth and moved to meet the enemy which was marching northward. It was at the battle of Gettysburg and though in action did not lose many soldiers. It followed Lee's forces southward and was in the engagement at Rappahannock Station after which it went into winter quarters at Brandy Station. There, nearly every member of the regiment re-enlisted and each received the usual furlough. On May 4, 1864, it left camp and on the day following was in the battle of the Wilderness where it lost sixteen killed and one hundred and twelve wounded, with Colonel Patterson among the killed. It was also engaged on the 6th, but its losses were not so great. At Spottsylvania it was in battle for nearly a week. At Cold Harbor it was engaged on the 3rd and 5th of June with thirty-nine wounded, among them Lieutenant-Colonel McIlwaine, who died shortly afterward. On

June 15th it crossed the James river and engaged in the siege before Petersburg. On July 9 it was ordered to Washington to aid in repelling the invasion through Maryland. It pursued the retreating foe and for two months was marching almost daily. On September 9th it crossed the Opequan with General Sheridan and was engaged in the battle of Winchester with a loss of five killed and twenty-three wounded. Again at Fisher's Hill its loss was thirty-one killed and three missing. On October 19, at Cedar Creek, on the day of Sheridan's ride, it lost seven killed and fifty-eight wounded. In December it returned to the entrenchments before Petersburg. On March 25, 1865, it advanced on the enemy but was repulsed and attacked them again on the following day. On April 2nd it was in the fight at Sailor's Creek but Lee's surrender on April 9th stopped further hostilities. It was finally mustered out of service on June 28.

The One Hundred and Third Regiment had Company C and parts of Companies F, I and K from Allegheny county. Late in February, 1862, this regiment went to Washington and then to the Peninsula. It was in the siege of Yorktown and in the battle of Williamsburg. It was also at the battle of Fair Oaks, losing eighty-four killed and wounded. It then worked on fortifications at White Oak Farm and suffered greatly from sickness. After the close of the Peninsula campaign the regiment went to Suffolk and in December to New Berne, North Carolina. It was in action at Kingston and acquitted itself nobly. From New Berne it made frequent expeditions into the surrounding country and in April moved to Plymouth. On the 20th of that month it was captured entirely and sent to Andersonville where one hundred and thirty-two of its men died. Most of the officers were taken to Macon, Georgia; some of the higher officers were taken to Charleston, where they were put under the fire of the Union guns that were then bombarding the city. When the regiment was captured, one company was at Roanoke Island and some others were absent on furlough and in hospitals. All these were brought together and continued as the One Hundred and Third Regiment. They were mustered out at New Berne on June 25, 1865.

The One Hundred and Fifth Regiment had one company from Allegheny county, that is, Company D. It went to Washington in October, 1861 and was subjected to much drilling in the winter of 1861-62. On March 17th, it was sent to Fortress Monroe. It was afterward at Yorktown, Williamsburg and Fair Oaks, and in the latter battle lost forty-one killed, one hundred and fifty wounded and seventeen missing. In the battle of Charles City Cross Roads, on June 30, it lost fifty-six killed and wounded. The regiment was at Malvern Hill but was not closely engaged. After the close of the Peninsula campaign it guarded the railroad between Manassas and Warrenton Junction, where two of its companies were captured and paroled. At the second battle of Bull Run it lost thirteen killed and forty-one wounded. When Pope's campaign had closed it was ordered to Washington to defend the city and remained there till after the battle of Antietam. It was at Falmouth and was two days in the bat-

tle of Fredericksburg, losing thirteen wounded and two killed. The regiment was in the battle at Chancellorsville, on May 3, 4 and 5, 1863, and with a force of three hundred and forty-seven, lost seventy-seven troops. On June 11th, it moved toward Gettysburg, where it arrived on July 1st and in the battle lost more than one half of all its strength. It went into winter quarters at Brandy Station and there nearly all that were left re-enlisted, receiving the veteran furlough. From the opening of the campaign, in the spring of 1864 till late in May, the regiment was constantly on the move and engaged almost daily. In June, it crossed the James river and was on duty in front of Petersburg. In December, it went into winter quarters and in March, 1865, it resumed active operations which were continued until the surrender of April 9th. It fought last at Sailor's Creek, on April 6th, and was at the grand review in Washington, being mustered out of service on July 11th. When it was mustered out there was not an officer, and but few of the men, who had joined it originally, who yet remained.

The One Hundred and Seventeenth Regiment, Thirteenth Cavalry, had one company, E, from Allegheny county, which was raised in August, 1862. In September, it was sent to guard the Potomac and to do general scout duty. In February, 1863, it went to Winchester and was on guard and scout duty generally. The country was filled with small bands of southern cavalry and the Thirteenth Cavalry was supposed to keep track of these and prevent them from committing depredations. It had, therefore, many skirmishes with them. They were sent, in June, to reconnoiter the Shenandoah Valley and the Strasburg road. They attacked a heavy force of cavalry at Middletown. The regiment was not at Gettysburg but was scouting through the country and, on October 12th, was engaged in a short fight in which it lost many prisoners. During the winter of 1863-64, the regiment did duty on the Orange & Alexandria railroad and, in January, went on a scouting expedition, during which it suffered severely from the cold weather. It was in the battle of the Wilderness from the 3rd to the 11th of May and was also in the battle of Spottsylvania. Later in May, it went on Sheridan's cavalry raid toward Richmond and lost ten killed and thirty-five wounded and missing. It was also with Sheridan on an expedition toward the James river and did a great deal of severe fighting and also assisted in the capture of the detachment of soldiers with a herd of cattle. It fought at Wyatt's Farm, September 29th, at Boydstown Plank Road, on October 22nd and at Hatcher's Run, on December 8th and 9th. Early in February, 1865, it went on an expedition to Gravelly Run, Dinwiddie Court House and Danby's Mills, where it was in a severe fight. It was then sent to Wilmington, North Carolina, after which it proceeded on a long march to open communications with General Sherman, whose army they met at Fayetteville on March 13. After Johnston's surrender the regiment for a time did duty in clearing the country of marauding bands of southern cavalry and in July it returned to Philadelphia where it was discharged on the 27th.

The One Hundred and Twenty-third Regiment was organized in pursuance of a call for volunteers to serve for nine months, made by President Lincoln on July 1, 1862. The regiment was filled to overflowing in July. The field officers were: Rev. John B. Clark, colonel; Frederick Gast and Richard C. Dale, lieutenant-colonels; and Hugh Danver and Charles D. Wiley, majors. Two of the companies of this regiment were raised in Tarentum and the others were all from Pittsburg and Allegheny. The companies were A, B, C, D, E, F, G, H, I and K. It was moved to Washington at once and was made to do picket duty between that city and the battle field of Bull Run. In September, it began a march through Maryland and reached Fredericksburg on the 16th, but reached Antietam too late to engage in the battle. The regiment then crossed the Potomac and marched to Warrenton, then to Potomac Creek, near Fredericksburg. On December 13th, it was engaged in a battle at that place, losing twenty killed and one hundred and thirty wounded. It remained in camp till January, 1863, when it moved to a camp near Falmouth, and on the 28th of May moved toward Chancellorsville. It was not actually engaged in that battle but lost, nevertheless, seven killed by the explosion of a shell, and five of its men were taken prisoners. It was mustered out at Harrisburg, on May 13, 1863, and was afterward disbanded in Pittsburg.

The One Hundred and Thirty-sixth Regiment, under Colonels Thomas M. Bayne and Isaac Wright, had in it Companies E, F, G and H from Allegheny county. It was also a nine months regiment and its rolls were completed on August 20, 1862, by selecting Thomas M. Bayne as colonel, Isaac Wright as lieutenant-colonel and Charles Ryan, of Tioga county, as major. It went to Washington on August 29th and for a time did duty in defending the city. On December 29th, it went to Frederick, Maryland, and from there moved to Sharpsburg. Later it encamped at Warrenton, at Brook Station, at White Oak Church and near Falmouth. It was engaged in the battle of Fredericksburg, losing in killed and wounded one hundred and forty. It returned to camp near Falmouth and did camp and post duty till April 28, 1863, when it marched to the battlefield of Chancellorsville. It was fired on by the artillery of the enemy, on April 30, and several of the men were killed and wounded. Although it participated in the battle generally it was not actively engaged and on April 5 returned to camp. At the close of its term of enlistment it went to Harrisburg, where it was mustered out on May 29, 1863.

The One Hundred and Thirty-ninth Regiment had Companies D, E, G, F, I and K from Allegheny county, and was organized on September 1, 1862. It reached Washington on the 3rd, and was directly sent to the battlefield of Bull Run, where it was employed for three days in burying the dead of that battle. It then followed and overcame the enemy on the 17th at Antietam, but was not engaged. In the battle of Fredericksburg, on December 13, it was under fire and lost thirteen men wounded, though it was not closely engaged. In the battle of Chancellorsville it was severely engaged, losing in killed, wounded and missing one hundred and twenty-three men. When the fighting

at Gettysburg opened it was thirty miles away but hastened forward and suffered a small loss. It went on the campaign which followed and was in the battle of Rappahannock Station. After much marching it went into winter quarters at Harper's Ferry. In March, 1864, it went to Brandy Station and in May with its ranks filled out by recruits, it entered the Wilderness campaign. In fighting there it lost in killed and wounded one hundred and thirty-six, including nearly all of its commissioned officers. It bore its part in the Spottsylvania Court House operations, being under fire almost constantly. It was engaged most severely at North Anna and was severely engaged at Cold Harbor. At Petersburg it was again in the front and was engaged in the operations there from June 15 to July 9, when it left for Washington to aid in repelling an invasion through Maryland. It lost severely on all these fields. On December 1, it returned to the front of Pittsburg, where it remained in camp during the winter. It took part in an assault on the enemy's works in March, 1865, and again at Petersburg on April 2. It was sent to North Carolina to support General Sherman. After Johnston's surrender it returned through Richmond to Washington, where it was mustered out of service June 21, 1865.

The One Hundred and Fifty-fifth Regiment, under Colonels Edward J. Allen, John H. Cain and A. L. Pearson, was composed of ten companies, eight of which, viz., A, B, C, D, E, F, I and K, were from Allegheny county. In September, 1862, it went to Washington, where it was stationed as a part of the defense of that city. From there it went to the battle of Antietam but left too late to participate. They first met the enemy in the battle of Fredericksburg and in a bayonet charge, made by it and other troops, it was hurled back with severe losses. At the battle of Chancellorsville, in May, 1863, it supported the battery but was not otherwise engaged. The next engagement was at Gettysburg, where it participated on July 2. Following Lee's army, it was in the battle of Rappahannock Station, at Mine Run and in other smaller engagements. In the winter of 1863-64, it was on guard duty along the Orange & Alexandria railroad. It was engaged in the battle of the Wilderness and in the operations near Spottsylvania, where it suffered severe losses. It was also at North Anna, at Totopotomoy and at Cold Harbor. On June 15 it crossed the James river and on the 18th took part in a charge which rescued the Suffolk & Petersburg railroad from the southern army, and it also joined in an attack on the enemy in possession of the Weldon railroad. On September 18 it had a contest at Peebles' Farm, and was also in the battle of Hatcher's Run, and later in the battle of Danby's Mills. It started on its last campaign on March 29, 1865. At Quaker Road it routed the enemy and captured some prisoners. It fought also at Gravelly Run, Five Forks and Sailors Creek. At Appomattox Court House it was ready to attack the main line of the enemy when a white flag was displayed and the great surrender was announced. It then came to Washington and was mustered out of the service on June 2, 1865.

The One Hundred and Ninety-third Regiment was enlisted for one hundred days under a call of Governor Curtin, in July, 1864, to meet an invasion

which threatened Pennsylvania. It was organized on July 9, with Rev. John B. Clark, formerly colonel of the One Hundred and Twenty-third Regiment, as colonel, James W. Ballentine as lieutenant-colonel and Horatio K. Taylor as major. Its companies were: A, B, C, D, F, G, H and K. Soon after its organization it went to Baltimore, where it was drilled constantly for two weeks. In August, one company was sent to Wilmington, Delaware, and the others guarded the Philadelphia, Wilmington & Baltimore railroad with headquarters at Havre de Grace. Four companies were then withdrawn and placed at Wilmington under Colonel Clark, who commanded that district, and this distribution of its forces remained till the close of the war. It was mustered out of service at Pittsburg on November 9.

The Two Hundred and Fourth Regiment, Fifth Cavalry, under Colonels George S. Gallupe and Joseph Browne, was raised mostly in Allegheny county. It was completed on September 10, 1864, and soon afterward went to Washington. It guarded the Manassas Gap railroad to protect construction trains. In December, the calvary and artillery commanded by General Mosby appeared and some severe skirmishes and fighting followed. Mosby then retired to the mountains, where a detachment of this regiment and a squad of cavalry moved stealthily by night and captured his artillery and some prisoners. After the battle of Cedar Creek the regiment returned to the forts north of Washington and a few days later went to Virginia where, in various battalions, it was engaged during the winter of 1864-65 in building stockades and blockhouses. "Expeditions were sent out in the spring of 1865 to the Bull Run battlefield to bury the dead of the second battle, nearly two thousand bodies laying uncared for since the battle. Monuments were erected near their graves." The regiment was mustered out at Pittsburg on June 30, 1865.

The Independent Battery, known as Battery C, was raised in Pittsburg for three years' service, in November, 1861. It was in the battle of Cedar Mountain on August 9; at Robinson's River on August 12; at Rappahannock Bridge on August 21 and 22; at Thoroughfare Gap, Second Bull Run, Chantilly, South Mountain, Antietam, Fredericksburg, Chancellorsville, at Gettysburg on July 2 and 3, at Mitchell's Ford, Mine Run and Morton's Ford on February 6, 1864. In May, 1863, Hampton's Battery (Battery F) was consolidated with it. The battery was renewed in the spring of 1864, and during the remainder of its term of service was used in defense around Washington.

Battery E, Knapp's Battery, was raised in 1861, in Pittsburg, and was at once attached to the Twenty-eighth Pennsylvania Infantry. It went to Washington, where it remained until late in the fall, when it was removed to the vicinity of Harper's Ferry to pass the winter, and there it frequently participated in skirmishes. It was in the command through the Shenandoah valley in 1862, when its guns were captured by the enemy but they were afterward recaptured. It was closely engaged in the battle of Cedar Mountain and in skirmishes under Pope in his retreat. It was in the battles of Antietam, Chancellorsville and Gettysburg. In the fall of 1863 it was sent to join the

"Army of the Cumberland." It was engaged at Wauhatchie, Lookout Mountain and Mission Ridge. Early in 1864 the greater part of its troops reenlisted and received the veteran furlough. Their ranks were recruited and it took part in the Chattanooga campaign and to Atlanta and was frequently called into severe engagements. It was with General Sherman's army on the great march to the sea and met with many losses. After that it marched northward through South Carolina and North Carolina, stopping at Raleigh a short time and then came to Washington. In June, 1865, it was moved to Pittsburg, where it was mustered out on the 14th.

Hampton's Battery, Battery F, was recruited in Pittsburg in October, 1861, and was sent at once to join other forces on the Upper Potomac. It was first in action at Dam No. 5, on December 18, and again at Hancock, Maryland, on the 4th, 5th and 6th of January, 1862. It was also in battle at Cross Keys on April 20, at Middletown on the 24th and at Winchester on the 25th. It fought at Freeman's Ford on the 22nd of August, at White Sulphur Springs on the 23rd and 24th, at Waterloo on the 25th, at Bull Run on the 29th and 30th, at Chantilly on September 1st, at Falls Church on the 2nd, at South Mountain on the 14th and at Antietam on the 16th and 17th. It was in the engagement at Charleston on November 9, and at Winchester on December 2, and passed the winter of 1862-63 in camp between Fairfax and Aquia Creek. On the 1st 2nd and 3rd of May it was engaged in the battle of Chancellorsville, where Captain Hampton was killed. The battery was then consolidated with Battery C, commanded by Captain Thompson. It was also in action at Gettysburg, at Blackburn's Ford, at Mine Run and at Whitehall Church. In February, 1864, it was engaged at Martinsford. In May it was moved to Washington and took part in the general defense of that city. In July it went to Harper's Ferry, encamping on Maryland Heights, where it spent the following winter. There most of its original troops, except the veterans, were mustered out of service. In April, 1865, the veterans and recruits returned to the army in defense of Washington, and on the 26th of June they were mustered out also.

Battery G, Young's Battery, was organized on August 21, 1862, and was made up mainly by Allegheny county soldiers. Soon after its organization it was removed to Fort Delaware, where it remained during its entire service. It was mustered out on the 18th of June, 1865. The troops of this company were mostly young men of superior education and ability and many of them were sent away or detailed to perform special duties, whilst it furnished, from its ranks, a large number of officers for other organizations.

Battery H was also recruited in Pittsburg and vicinity and was organized on the 30th day of September, 1862. It was immediately sent to Hagerstown, Maryland, where it arrived soon after the battle of Antietam. In December it was removed to Camp Barry, in the District of Columbia, and remained there during the winter. Early in the spring it went to Alexandria and for two years was engaged constantly in doing provost duty and in fighting against the forces of Generals Stuart and Mosby. It returned to Camp Barry in January, 1865, and

in June went to Pittsburg, where it was finally mustered out of service on the 18th.

This does not include all the soldiers who enlisted from Pittsburg, Allegheny and surrounding boroughs. The above named regiments and the services they rendered in the war are given as fairly representative of the work performed generally by the Pittsburg soldiers.

CHAPTER XIV.

Civil War Continued—The Closing Scenes of the War.

But the soldiers who went to the front were not the only ones who labored for the cause during the Rebellion, though upon them of necessity fell the heaviest burdens and the severest sufferings. Many Pittsburgers who remained at home were equally loyal and patriotic and were able to manifest these feelings in many ways. When the battle of Shiloh took place the wealthier people of Pittsburg and Allegheny chartered two steamboats, fitted them out completely, stocked them with hospital supplies and tendered them to Secretary of War Stanton for the relief of the army. They were sent down the river at once to the relief of the stricken though victorious army. These boats, named Hailman and Marengo, carried with them the ablest physicians and surgeons in the cities who never thought of asking or receiving remuneration for their services. They were under the charge of Felix R. Brunot. The main object was to take on board the wounded soldiers from whatever section, and bring them to Pittsburg that by tender care they might be brought back to health. They were able to relieve all those who needed such assistance who hailed from north of Shiloh, but both boats were completely filled at the start. They began their homeward journey with two hundred and forty disabled soldiers and as they came north on the Ohio and passed near the homes of the wounded on board, all who so desired were left at the wharves nearest them. They reached Pittsburg April 26 and 27 with seventy wounded men who were placed in the hospitals. Only eight of these died in the hospitals and the others were sent to their homes as soon as they had recovered sufficient strength to enable them to endure their journeys.

In 1863 the people in this vicinity were greatly frightened by a rumor that the army of General Lee was about to invade Western Pennsylvania, in which case all knew that the objective point would be Pittsburg. It was in June shortly before Lee's army actually did invade the state at a point some two hundred miles southeast of Pittsburg. In preparing for this raid Lee had sent out scouts to determine and report the situation generally. They came into the Juniata Valley and some of them came to Mechanicsburg in

Fulton county, while still fewer numbers came as far west as Morgantown in West Virginia, about one hundred miles south of Pittsburg by river. Major-General Brooks had at that time command of the region around the Monongahela south of Pittsburg. There was no telegraphic communication then such as we have now, and the movements of these scouting troops were communicated by messenger and thence by wire to Major-General Halleck and to Edwin M. Stanton, secretary of war. From this imperfect and greatly delayed information they concluded that the city of Pittsburg was in great danger of being invaded by Lee's army or by large detachments sent out by him. Both Stanton and Halleck telegraphed their fears to General Brooks, advising him that the city was in imminent danger and that he should take immediate steps to defend it against an impending invasion. These telegrams reached Pittsburg on Sunday evening, June 14, 1863. A meeting was called at once by General Brooks so that a consultation with the leading men of the cities might be had. Most of the prominent citizens were at church where the messengers readily found them, while others were summoned from their homes. They were very soon assembled and the consultation lasted until midnight. The consensus of opinion was that all workshops, factories, etc., should be closed at once and that all men capable of performing manual labor should be put to work to throw up earthworks around Pittsburg and Allegheny. The plans were laid out by government engineers and the entrenchments were to be made as strong and perfect as possible. The work was pushed as rapidly as it could be for two weeks. Men came from all directions. Merchants closed their stores and with their employes, worked in the trenches. Jones & Laughlin asked for the plans of the fortifications thought best for the hill above their works and said: "We will do the rest." They put about 2,000 men at work on them and at their own expense. The Pennsylvania railroad sent two hundred men and twenty carts. Jefferson College sent ninety students who worked nobly and all organizations in the city vied with each other in doing the work. For several days sixteen thousand men worked at the fortifications and the city, for a fact, looked like a city fortified for war. The breastworks thus hurriedly thrown up extended from Sawmill Run on the south side to the top of Coal Hill, at a point opposite Four Mile Run, and thence across the country from the Monongahela to the Allegheny river. On the Allegheny side they were next to the river down the Allegheny and the Ohio rivers reaching below the outskirts of the city. The work was done in the best style possible in that day for a city so far removed from the munitions of war and would undoubtedly have been considerable of a barrier to the invading army had it appeared. The embankments may yet be seen in a few places but with the extensive upbuilding of the cities they have nearly all disappeared. If some parts of them could be preserved they would one day be regarded as of great historical interest.

It is scarcely possible that Lee ever intended to invade this part of the state, but if so, the intelligence of the cities' preparation to meet his army if it came, doubtless prevented him from executing his purpose. The archives of the southern army fail to show that such a purpose ever existed. It was more likely agitated as a favorite idea of some idle dreamer and perhaps was examined into by those in authority, but was certainly never seriously contemplated. As we have said, Pittsburg was an important manufacturing center of all kinds of war material and its possession would have been of inestimable value to Lee's army. Its importance to the South was well known and appreciated by the average Pittsburger and this led many to believe that it was Lee's objective point. Yet its great distance from the main southern army would not warrant him in thinking that even if his army could have captured it, they could have held it for any length of time. But the people of the cities showed to the world that they were willing and able to defend themselves, and in this alone they were greatly benefited by the groundless fear as expressed in the telegrams of Stanton and Halleck.

The Allegheny Arsenal played an important part in making Pittsburg prominent during the Civil war and it assisted materially in strengthening the northern army. So many references have been made to it that perhaps a brief notice of its origin may interest the reader. In April, 1814, the United States government purchased thirty acres of land on the Allegheny river in what was then known as Lawrenceville. It was purchased from William B. Foster, who has been spoken of in these pages as a pioneer of Pittsburg and as the father of Stephen C. Foster. The government from time to time added to their grounds until the lot contained thirty-six acres. Massive stone walls were built inclosing the grounds and were finished in 1829. Arsenal buildings had in the meantime been erected within the grounds and all kinds of ammunition, infantry and cavalry equipments, caissons, gun-carriages, etc., were made there. When the Civil war came, all possible war implements were again manufactured in the arsenal, and this was carried on on a much more extensive scale than ever before. About twelve hundred workmen were employed almost constantly and the output of war material was immense. It was sent to the western army largely, but also to the army at many other points. Heavy ordnance was not cast by it, the casting being confined to small cannon. After 1868 all manufacturing in the arsenal ceased, but it was kept up for many years as a military post, being used for storing and as a distributing point. Recently the arsenal was abandoned and the government donated the land upon which it was situated to the city of Pittsburg as a park. This gift was brought about largely through the efforts of Hon. James Francis Burke. The following is a list of the commandants of the arsenal from 1814 till it ceased to be a military post: Major A. R. Wolley, Captain George Talcott, Major Sylvester Churchill, Major R. L. Baker, Major H. K. Craig, Captain Edward Harding, Major W. H. Bell, Lieutenant T. J. Rodman, Lieutenant T. J. Breveton, Major John Symington,

Colonel R. H. K. Whilely, Major A. R. Buffington, Major J. W. Reilly, Major George W. McKee.

The saddest page in the arsenal's history is the story of the explosion in 1862, in which seventy young women lost their lives. A great deal of blame has always been attached to the commandant, Major John Symington. The best that can be said for him is that he manifested a reckless and inexcusable want of caution in the management of the arsenal and that this spirit made the explosion possible. When he took command of the post there were three laboratories, all too small for war times, in which ammunition was manufactured. By his advice the government was induced to abandon these and erect one large one to be used in their place. The new laboratory was in charge of Patrick McBride, who became connected with the arsenal in 1844, and remained there for nearly a quarter of a century. He was in the arsenal on the day of the explosion and escaped death only by throwing himself through a window. The causes which brought about the explosion are not pleasant to contemplate, for a grain of caution might have prevented the sad affair. When the new laboratory was built it was wisely located some distance from the other buildings, and a stone walk was laid at once, connecting it with them. The stones used in the walk were of a hard flinty nature. When they were being cut by the masons, it was noticed that almost every stroke of the workman's hammer drew sparks from the flinty stones. It was suggested to the commandant that he have other stone of a softer quality from a quarry near by substituted in their stead. Symington replied that the contract had been placed for the stone then being put in place and that the change could not well be made. It was then suggested to the commandant that the walk be covered with sawdust, tan bark or sand, all of which were easily accessible. This precautionary proposition was also refused. When the walk was finally finished, it is said that McBride had it covered with cinders, perhaps transgressing his authority in having it done without consulting the commandant. When he discovered it, he reprimanded McBride for acting without authority and ordered the cinders removed at once.

In working the powder into ammunition small quantities of fine dust were daily emitted, and this permeated and settled in every part of the building. Noticing this, the commandant was asked to grant the girls employed in the laboratory a half holiday on Saturday, so that the inside walls might be flushed with water and the dangerous dust removed. This request was refused for the reason, as stated, that the government was in great need of ammunition, indeed in need of more than could be turned out by working full time, and that no time must be lost in flushing walls.

The weather for some weeks before this request was made, had been very warm, and the atmosphere was extremely dry. Not a drop of rain had fallen for more than a month before September 17, 1862. On that day four tons of powder had been put into the laboratory, though it was already well filled and had several other highly explosive substances within its dust-covered

walls. In the early part of the afternoon a team was driven to the laboratory to convey away a load of ammunition to be forwarded to the Union army. While standing near the building, one of the horses, it being bothered with flies, began stamping on the flinty walk spoken of. In this way, it is supposed, a spark was generated which ignited the dust and this instantly communicated with the ammunition room. The main supply of powder was not exploded at once and had the doors been open many of the employes might have escaped. As it was, with the first flash within the room a general rush was made for the doors, which unfortunately all opened inward. They were heavy doors and the weight of the employes who, in their excitement, were jammed against them in trying to open them, only closed them tighter and as effectually cut off all escape as though they had been closed with bars of iron. In another instant the main supply of powder was ignited and a most terrific explosion followed. Seventy young women and three men were killed instantly and several others were fatally injured and died soon afterwards. The laboratory was torn to pieces, its walls falling in every direction. The trees near by were filled with fragments of women's clothing and with dismembered parts of human bodies. Forty-five of the victims were so badly mangled and burned that they were beyond all recognition. At an inquest held immediately after the catastrophe the jury in its verdict was very severe on McBride and the other officers in charge of the arsenal. The unidentified dead were buried together in the cemetery belonging to the government, and a monument was erected to mark their last resting place. Nearly all the victims were young girls between the ages of sixteen and twenty who were employed in making cartridges and in other light work in the arsenal.

In the early part of the war men enlisted readily from whatever section they chanced to be in when the opportunity came. Pittsburg being naturally a commercial and railroad center for the western part of the state, it is quite probable that her enlistment rolls bore the names of many men who did not belong to Pittsburg or to Allegheny county. Later in its progress each section was expected to furnish its quota of men and to obviate the necessity of drafting men, local bounties were paid by almost every ward, borough or township in the state, and enlistments were watched more closely. Up until the close of 1862, Allegheny county had enlisted 13,248. These were readily induced to enlist and most of the time but little account was kept as to whether the county was furnishing more or less than her share. For a fact, however, during the first year or more the county was ahead and considerable difficulty was experienced in getting the war department to accept soldiers even after they had formed companies and were ready for the front. But when the war was prolonged and more soldiers were needed, a more strict account was kept and the municipalities were glad indeed if they could fill their quotas without resorting to the draft. Under the call for troops made by President Lincoln in June, 1863, Allegheny's quota was 3,600. The next call came the following October, when six months men

were required and Allegheny's quota was 2,600. In February and March, 1864, two calls were made, Allegheny's quota being 4,308. In June followed a call for one-hundred-day men and her share was 1,488. Her quota for the call of July was 3,000 and under that of December following was 2,000. All these were filled to the letter, though not without drafting, by the wards, boroughs and townships of the county, and by adding them it will be found that 30,244 men enlisted who were accredited to Allegheny county. Many of these who enlisted for short terms early in the war enlisted a second time and some of them a third time. It is usually claimed, and not without abundant proof, that the county furnished 30,000 soldiers during the war, and that these enlistments represented at least 20,000 different men. Of this number fully 4,000 never returned. This statement is taken from the soldiers' monument in Allegheny and is undoubtedly not overdrawn.

A collection of cities whose love for the Union was sufficient to prompt them to put forth all these efforts which have been but meagerly chronicled here, would naturally, one would suppose, rejoice greatly when the war was over, and welcome the soldiers on their return, in a manner befitting the victories they won in the long conflict. No city in the Union was more delighted with the termination of the war than Pittsburg. Early in 1865, when it became patent to the north that the war must soon terminate, the people began to talk about a grand celebration, the grandest in the history of the city. The first demonstration was on March 4, when Abraham Lincoln was inaugurated a second time. The air that day was filled with flags, bells pealed forth in tones of joy all day and a hundred guns were fired on the eminence above Bayardstown. Public meetings were held that evening and patriotic songs and eloquent addresses were the order of the hour. When the Confederate government was compelled to flee from Richmond, the news which reached Pittsburg on the morning of April 3, again filled the city with enthusiasm. Fifth avenue in a few minutes was a living mass of joyful humanity.' Bells were rung, guns were fired and many eloquent men were drafted for impromptu addresses. When the news arrived court was in session but the cheering soon became so intense and the excitement so great that the judges quietly adjourned court till the next morning, whereupon all in the court rooms, including the judges and the lawyers, began to shout with joy, and all hurried to the streets to learn the latest news. A public meeting was held in the afternoon in Wilkins Hall, in which arrangements were made for a great jubilee. In the evening the multitude collected about the corner of Fifth avenue and Smithfield street. It was also informal like the one in the forenoon, but they passed resolutions to suspend all business the day following, to fire a hundred guns from the battery and gave out that a torchlight procession would take place in the evening. The streets were densely packed and all were cheering for Lincoln, Grant, Sherman and Sheridan.

On Tuesday, April 4, the people of the cities gave themselves up to joy. The great buildings were covered with flags and streamers. All factories and

shops were closed and at night the sky was filled with rockets, and the streets were filled with an apparently endless procession of torchlights. For a few days after this the people of the cities rejoiced generally, but gradually resumed their daily callings until April 9, when they were again raised to the highest point of excitement by the news that Lee had surrendered to Grant at Appomattox. The news reached Pittsburg late at night in the midst of a heavy rain that seemed to be utterly ineffectual to keep the cheering masses from the streets. It moreover came on Sunday night but in a short time bonfires began to blaze and skyrockets illuminated the heavens. Speeches were made on public corners. Then the bells began to ring and the bands to play and very soon a marching procession was formed which went cheering through the streets. By midnight there was scarcely a house in the city that was not illuminated. Knapp's Battery began to play but after firing thirteen shots their powder was exhausted. A new supply was secured as soon as possible when the heavy firing began again and was kept up till morning. This spontaneous and almost universal manifestation of joy triumphant, was practically unabated for four days, when news of "the worst thing that has happened since the war began" came to drive all thought of jubilee from the minds of the people and drape these and all other cities in the Union in the sad habiliments of sorrow and gloom. It was the awful news of the assassination of Abraham Lincoln which darkens a page found elsewhere in this work.

Almost at the beginning of the Civil war the women of Pittsburg began active service for their soldiers. The Pittsburg Subsistence Committee was organized and the following appointed as a committee: Thomas M. Howe (chairman), B. F. Jones, George Wyman, William Thaw and John Scott. It was the self-imposed duty of this organization to attend to the subsistence of such companies of soldiers as were formed, until they were mustered into United States service. The first meals were served in the old Leech warehouse, corner of Penn and Wayne streets, where a whole regiment could be given a meal at once. The work of this committee, while divided with other societies, was continued until the close of the conflict.

The first steps to furnish relief to the families of volunteers were taken by the committee of public safety, who appointed sub-committees of relief, with branches in every ward in the city, on April 17, 1861, within a week after Fort Sumter had been fired upon. The 23d of the same month the Allegheny council appropriated $5,000 for a relief fund and Pittsburg, about the same date, doubled that amount. This, for the time being, amply provided for the families of those who had volunteered and gone to the front during the months of April, May and June. Previous to May 4, 1861, the committee had received cash or its equivalent to the amount of $11,374, of which sum the banks donated $3,000. May 8, 1861, the women of Pittsburg responded to the call made by Miss Dorothy L. Dix, of Washington, to furnish shirts, socks, etc., for the volunteers.

Section 16 of the Three-million-dollar Loan Bill passed by the Pennsylvania legislature, constituted the associate judges and county commissioners of each county a board of relief, while section 17 authorized the county authorities to levy a tax, not exceeding two and a half mills on the dollar, for the purpose of soldiers' aid. Within about one month there had been received and paid out $18,483, and by June 4, the same year, the committee was providing for 502 families, furnishing them with flour, meat, coffee, sugar, clothing, etc. By October 20, 1861, so many men had gone to the war from Pittsburg and vicinity, that relief was being dispensed to 687 families in Pittsburg; 366 in Allegheny City; 508 in the boroughs, and 471 in the townships of Allegheny county—making a total of 2,032 families to which there was paid out nearly $4,500 each week.

November 1, 1861, the relief board made the following statement:

District.	Applications.	Paid out.
Pittsburg	772	$ 6,600
Allegheny	402	3,564
Boroughs	599	5,712
Townships	529	5,100
Total	2,302	$20,977

Prior to December 28, 1861, there had been paid out by Allegheny county, to families of volunteers, the sum of $38,000, of which $10,000 was borrowed from the banks. The state of Pennsylvania spent in Pittsburg $74,000 for clothing, meat, bread, lumber, drugs, shoes, stoves, coal, mattresses, etc., for the army, as is shown by the report of the auditor general of the state. Yet with all the funds appropriated, the enlistments were daily increasing, and with them grew the demand for bread and clothing for children, whose fathers were doing service at the front. Consequently, a large mass meeting was held for the purpose of negotiating a loan. A number of the boroughs were represented and offered appropriations. Plans of all sorts were instituted for raising relief money: Lectures, aid societies, performances, suppers, festivals and the like all served well the purpose and were well patronized.

April 15, 1861, the day President Lincoln issued his call for 75,000 men, the women of Bridgeport, Connecticut, organized a society, the final outgrowth of which was the formation of the United States Sanitary Commission, which by the following September had branches to the number of seven thousand in the loyal states. Up until May 1, 1866, when it disbanded, there had been received in cash seven million dollars, and an aggregate of twenty-five million dollars in cash, goods and services rendered, all of which was spent at home and in hospitals and on battle fields. A branch of this great organization, the head offices of which were in New York for the East and in Chicago for the West, was installed in Pittsburg, October, 1861, under Jacob Glosser, government agent, who appointed committees of ladies in each ward, borough and township in the county to form societies to carry out the purposes of the society.

Contributions were placed with Postmasters S. F. Van Bonnhorst, of Pittsburg, and Samuel Riddle, of Allegheny City.

On June 17, 1862, the Pittsburg Commission sent twenty-six delegates to the hospitals of the Army of the Potomac; six were left at Fortress Monroe, and the others reached Savage Station, and at once had all they could do taking care of the wounded men brought from the battle field before Richmond. When the army fell back eleven of these delegates, including Felix R. Brunot, the philanthropist, fell into the hands of the enemy, and were sent to Libby Prison, and kept until exchanged. Scarcely a battle was fought in the Civil war in which Allegheny men participated that was not followed by surgeons and supplies by the Pittsburg branch of the Sanitary Commission. The women of Pittsburg also sent to the front large quantities of finger-stalls, dressing gowns, socks, towels, pillows, pillow-slips, bandages, blankets, sheets, canned goods and books.

In April, 1863, when the United States Christian Commission established a branch in Pittsburg they were given possession of the store room and the management of relief was thereafter in their hands. From January, 1862, to April, 1863, the local subsistence committee received and forwarded to the field $65,000 worth of supplies for hospitals. The men and women who gathered together and sent these supplies are entitled to much credit for their heroic, self-sacrificing labors in relieving the sick and wounded men of both armies. Before the subsistence committee turned over the management to the Christian Commission, it had in January, 1863, established a "Home" for sick and wounded soldiers. At first a small room at No. 34 Liberty street served to house the men, twenty-one in all, who had no means of obtaining meals. July 23, 1862, a report was made showing they had supplied over fifty thousand men with meals and medicine, as they were passing through the city. About 24,000 articles had been contributed by Allegheny and adjoining counties and sent on to the scene of the conflict. On the night and morning of September 28 and 29, 1861, they fed 4,340 troops, enroute for the southland. Within four days, including the two just named, a total of 8,011 men had been cared for. This was but one of many like instances during the long war of four years, in which this society liberally aided and accomplished in their way as much to suppress the great rebellion as did the men with shot and shell upon the actual field of battle.

After the never-to-be-forgotten battle of Stone River in December, 1862, when General Negley's brigade lost so heavily, in one day $12,000 in cash was donated to this committee. Each person vied with his neighbor in doing what he could. One merchant gave three hundred pairs of socks knit from good woolen yarn, while an old lady insisted on giving her last fifty cent piece. During the year ending January 15, 1863, this committee collected in round numbers, $50,000 in cash and supplies. In 1863 they sent to the field and hospital the following articles: 818 comforts, 2,310 pillows, 2,382 pillow-cases, 1,950 sheets, 5,434 towels, 2,543 pads and rings, 17,000 bundles of lint,

9,483 rolls of bandages, 2,240 bundles of muslin, 177 blankets, 2,542 pairs of drawers, 2,960 muslin sheets, 1,340 flannel shirts, 243 bed-ticks, 443 neck-bands, 279 dressing gowns, 3,000 pairs of socks, 234 pairs of mittens, 567 pairs of slippers, 6,885 handkerchiefs, 4,696 cans of fruit, 1,840 quarts of wine, 1,111 pounds of butter, 2,100 dozen eggs, 13,000 books, 6,165 pounds of dried fruits, 1,876 packages of corn starch and tobacco. To the "Soldiers' Home" was added sleeping rooms, and May 5, 1864, more room was provided by the use of the 2d, 3d and 4th floors of the building at No. 34 Liberty street. So thoroughly independent and American in their actions were the women of this society, that upon opening this new home for the relief of sick soldiers, one hundred and sixty-four of the number signed a solemn pledge agreeing to not buy any article of foreign make during the war. They formed a society of which Mrs. Felix R. Brunot was president; Mrs. F. Volz, vice-president, and Miss M. M. Maitland, secretary. The original pledge was modified to read as follows:

We will not purchase any articles of foreign manufacture for which American can be used or substituted, and will not purchase any article of luxury, such as velvets, laces, embroideries, etc.

By March 1, 1865, they had received $61,580, and disbursed $54,334. To impress the reader with the idea that not alone in Revolutionary days did the American women do their share in the support of the country in which they lived, but as truly in the Civil war conflict, were they full of self-sacrifice, the subjoined report of the Pittsburg branch of the "Commission," of July 1, 1865, is given:

Total number of men fed by the Subsistence Committee, 460,000. The United States Christian Commission, from its organization in April, 1863, to July, 1864, had contributed in cash, $21,348; value of stores donated, $45,708; value of supplies sent to the armies, $54,079; value of reading matter sent, $4,635, making a grand total of $125,772.

The first annual meeting of the Pittsburg branch of the Christian Commission was held in the First Presbyterian Church on Wood street, Sunday, May 8, 1864, when a great assemblage of patriotic men and women gathered. Among those present were George H. Stewart, of Philadelphia, president of the national organization; Rev. Herrick Johnson, president of the Pittsburg branch, and Rev. Dr. Priestly, all of whom made addresses eloquently appealing for aid. Within three days $28,500 had been raised, including these individual subscriptions: William Frew, $5,000; T. S. Clark, $2,000; James O'Hara, Charles Lockhart and William Thaw, each $1,000. Ten thousand dollars of this splendid sum was sent to the national committee. Up to July, 1865, the sum of $159,361 in cash and about three times as much in supplies had been received and disbursed. The Pittsburg branch of the United States Christian Commission ranked fourth in the country in point of benefits and service.

THE SANITARY FAIR.

At a great mass meeting held by the loyal citizens of Pittsburg on March 5, 1864, it was decided to hold a Sanitary Fair. An executive committee was appointed, and their names should ever appear among the honored men of Greater Pittsburg. They are as follows: Felix R. Brunot (chairman), Thomas M. Howe, John H. Shoenberger, J. I. Bennett, John W. Chalfant, Charles W. Batchelor, B. F. Jones, James O'Connor, James Park, Jr., Mark W. Watson, James Watt and W. S. Haven. The ladies' committee consisted of the following: Miss Rachel W. McFadden (chairman), Mesdames F. R. Brunot, Tiernan, Paxton, Price, William Bakewell, Kayes, John Watt, Brady Wilkins, Algernon Bell, and Misses Susan Sellers and Mary Moorehead. Circulars were sent out to all parts of Western Pennsylvania, and to the North especially, and to the country at large in general, calling for "Anything that could be eaten, worn, sold or was curious to look at." In April, ten car-loads of lumber came in one lot to be used in the erection of the necessary buildings. The fair was held on the West Common, in Allegheny City. The various buildings went up as if by magic, and all by the hands of free labor. There was a floral hall, ladies' bazar, refectory, an exhibition hall, a monitors' hall, and a mechanics' hall. At the city council chambers was located the Old Curiosity Shop and art gallery. By May 26 the Sanitary Fair fund had grown to $46,711; of this sum $2,000 was cheerfully forwarded to the suffering soldiers on the battle fields of the Army of the Potomac. The fair opened June 1, 1864, when the treasurer, Nathaniel Holmes, reported on hand, $84,059, with pledges sufficient to make it $100,000, of which sum the Pittsburg iron firms gave $15,750, and the banks of the two cities, $12,380. At the outset it had been determined that ten per cent. of the net proceeds should go towards erecting a soldiers' home for the use of the subsistence committee, and twenty-five per cent. toward a house for disabled soldiers and their orphans, unless the money should be needed for the sick and wounded during the progress of the war. It will be remembered that the outlook was very gloomy at that time. The opening of this Sanitary Fair was an event grand and inspiring, and such as is given to but few nations to behold—perhaps never again will its like be seen in Pittsburg. General Negley, as chief-marshal, led the great procession. Governor Curtin and his staff, with city officials of the two cities and the borrough officers, the fire engine companies, many civic societies and unions, started from near the Monongahela House at four o'clock in the afternoon, and marched through Smithfield, Fifth, Market, St. Clair and Federal streets over the suspension bridge to the fair grounds in Allegheny, where an address was made by Governor Curtin. About five thousand people were present. The first day's receipts were $14,445. Large sums were raised by voting who should have certain articles, bids counting for votes. This included contests for flags to regiments and steamers, pistols to General Herron, a fine chair to Mrs. General Hay, gowns to Generals Grant and Mc-

Clellan, a sword of Pittsburg steel to General Sheridan, and an immense fruit-cake to President Lincoln. The ladies' bazar realized $55,000, and the floral hall $8,250. From all sources this great Sanitary Fair realized $363,570, which equalled almost $3.50 for each man, woman and child in the two cities and adjacent boroughs. It did not all come from Pittsburg. Venango county, then rich in the product of oil, contributed $18,555; Lawrence county, $8,144, and all other Western Pennsylvania counties, $13,760. Chicago sent in value, $6,000. By a resolution passed by the Pittsburg Sanitary Commission, August 9, 1864, $80,000 of the proceeds of this fair was set aside for the future establishment of a soldiers' home, should the sum not be needed by the emergencies of war. April 6, 1865, the sum of $100,000 (which included the $80,000 named), was appropriated for the establishment of a home for maimed, disabled and aged soldiers of the Union army for Western Pennsylvania. The fair continued from June 1 to June 18, and at the final closing of the accounts of the executive committee, the following farewell statement was issued:

In closing our official duty in connection with the Pittsburg Sanitary Fair, the members of the executive committee desire to express their obligations to the many generous hearts and busy hands which have co-operated with them, and especially to the ladies, without whose aid there could have been no such magnificent results. For ourselves, and on behalf of the thousands of our country's defenders who have reaped, and are still reaping, the benefits of their generous labors, we offer our most grateful thanks.

(Signed.)

FELIX R. BRUNOT, chairman.
JOHN W. CHALFANT,
J. I. BENNETT,
CHARLES W. BATCHELOR,
JOHN WATT,
M. S. HAVEN,
JAMES PARK, JR.,
B. F. JONES,
JAMES O'CONNOR,
M. W. WATSON,
JOHN H. SHOENBERGER,
THOMAS M. HOWE,
Executive Committee.

Pittsburg, Pennsylvania, April 10, 1865.

The people of Allegheny county were justly proud of the part they had performed in the war. Soon after its close the erection of a monument to the soldiers who had died in the service was agitated by the leading men and women of the county. Accordingly at a union convention held in the court house on June 6, 1865, a resolution relative to a monument was offered and adopted unanimously. The resolution provided for the appointment of two committees, one to raise the money necessary to erect the monument, and one to select a suitable location for it. The soldiers then living in the county formed an association and attempted to raise the money needed, but succeeded only in securing about $1,500. This sum was put on interest, and the project was temporarily abandoned. Finally a number of prominent women of Pittsburg became interested in it and elected Mrs. Samuel McKee as president of their association. Among others who thus became interested were: Mrs. C. C. Scaife, Mrs. Annie Stewart, Mrs. Q. A. Scott, Mrs. John Barton, Mrs.

H. H. Mann, Mrs. Marcellin Cotë, Mrs. L. S. Johns, Mrs. Alexander Chambers, Mrs. R. D. Thompson, Mrs. R. E. Sellers, Mrs. B. Preston, Mrs. A. L. Pearson, Mrs. R. Robinson, Mrs. John Watt, Miss Sue McCord, Miss Mary Howard, Miss Linne Prestley, Miss M. Galway and Miss Mattie Fowler. These women and others worked faithfully, and very soon succeeded in raising twenty-five thousand dollars, and thus assured the erection of the monument. Locations were then offered. The Allegheny Cemetery Association proposed to give a large lot and to build a proper foundation for the monument if it should be located there. The Allegheny Park Commissioners offered to furnish a site, to build the foundation, to maintain the monument in good condition forever, and to donate at least five thousand dollars additional towards the fund. Notwithstanding this, the women who had done so well in securing the money, or at least a majority of them, favored the proposition of the cemetery association. This was a very unpopular selection, and was most bitterly opposed, particularly in Allegheny, and from the county generally. The association was incorporated in 1869, and a building committee was appointed, consisting of General A. L. Pearson, Captain W. B. Cook, John Chislett and Clarence S. Johns. A design of a monument estimated to cost $26,000 was adopted, and the question of location submitted to a vote of the people of the county. The result was as follows:

	For location in Pittsburg.	For location in Allegheny.
Pittsburg	2,495	1,161
Allegheny	12	5,972
Boroughs	267	1,156
Townships	530	4,026
Total	3,304	12,315

Majority for Allegheny 9,011.

The women then held a fair and raised in that way about $1,500, and all in the treasury was put at interest. On April 1, 1870, the park commissioners began to build the foundation, and on May 30 following, the corner stone was laid with the usual ceremonies. The fund then available was as follows: Raised by the women, $28,000. Presented by the park commissioners, $5,000. In addition to this the county commissioners, on the part of Allegheny county, donated $5,000, making in all $38,000. The original design was improved and enlarged so that the entire sum was needed. The monument is built of sandstone. The central and main part is a colossal statue representing Fame. On the four sides of this are representations of artillery, cavalry, infantry and navy. Work on it was pushed rapidly in 1870, so that on May 30, 1871, it was ready for dedication. John W. Geary, governor of Pennsylvania, and General George G. Meade were in attendance, and each delivered short addresses. John M. Kirkpatrick, who afterwards served many years on the Allegheny county bench, made the chief dedicatory address. He spoke elo-

quently as he was want to do, and referred touchingly to the 4,000 soldiers of Allegheny county, who laid their lives on the altar of patriotism. Whether one enters the city by steam or trolley car, or by boat, this silent sentinel looms up and in testimony of the county's valor from the day that Fort Sumter was fired on until the surrender at Appomattox.

CHAPTER XV.

CHURCHES.

Presbyterian—United Presbyterian—Christian.

Pennsylvania in its formative period surpassed all other states or colonies in religious toleration and in the number and diversity of the theological tenets of its people. From the first settlement effected by Penn and his Quaker adherents, the Province became a home and place of refuge for all discordant elements in Europe. Particularly did they come here if they were persecuted at home because of their religious beliefs. Other colonies were formed by people who sought religious toleration in the New World, but most of them instituted a series of persecutions in America that was scarcely less vigorous than those they had fled from in the Old World. The Puritans, who were perhaps more determined than any others to worship as they saw fit, were not by any means tolerant of other beliefs when they finally settled in Massachusetths. It was quite different in Pennsylvania, for with perhaps one exception, we had absolute toleration of all religions, and this gave us more denominations than any other state in the Union, if not more than all others combined. It is not to be understood by this that these religious elements were always tolerant of each other, but that the early governing powers of the state did not attempt to exercise any authority over the manner of their worship in any way.

There is little doubt but that had the colonies been all Puritan like Massachusetts, or all Cavalier like Virginia, congress would have been forced to establish a church as the sanctioned religion of the new nation, thus following the general religious policy of the European countries. In Pennsylvania we had all kinds of religious beliefs, and among our people were many liberal thinkers and many prominent men who were not attached to any particular religious organization. This lack of a predominating religion in Philadelphia, where the continental congress sat in many of its sessions and where the constitutional convention met in 1787, prevented these law-giving assemblies in no small degree from prescribing an established religion. Indeed it may be said that our many religious beliefs prompted both bodies to sanction our

Pennsylvania system of toleration as the prevailing one throughout the Union. Here in Pennsylvania was genuine religious freedom. The Congregationalists in the East and the Episcopalians in the South were intolerant of all other forms of worship, but what might be called persecutions on account of religion, while they were common in New England and in Virginia, were practically unknown from the beginning in Pennsylvania. The Acadian persecution of 1755 was the only exception in the history of the province, to complete toleration to religious belief. Our system of religion then differed none whatever from that which is common in the United States to-day. We have, it is true, on our early statute books a few laws known as "blue laws," a name given them because they resembled the rigorous "blue laws" of New England, but we never had any that in severity compared with those of other states. Nor is there any indication that our people were less moral, that we were more negligent of church duties or less enthusiastic in going into all the world and preaching the gospel to every creature. Nor were our people ever accused of being less devout in their observations of the first day of the week than the people of other states. Though our laws recognized marriage as a civil contract into which our people entered with almost no ceremony at all, each church adopting its own form be it ever so simple, yet our people adhered as closely to its vows as the citizens of any other state. This generous view of life, this universal toleration so thoroughly lived up to led our law givers to adopt ours as the national system of religion, if it can be said that any system was adopted. This liberality continued to add new elements from Europe each year to our population. Here at last the European found a province in America where no man would be persecuted because of his religion, or because of his lack of religion, yet he was assured that the morals of the province were as high, and its piety as sincere and widespread as in any other colony.

Philadelphia and the eastern counties were settled largely by Quakers, but they did not hold their own as the state filled up with Europeans. While in the early years of the province they far outnumbered all others, they have gradually lost ground until they are now found almost entirely in three eastern counties. As we have seen, the predominating nationality in Western Pennsylvania generally was Scotch-Irish, and they brought with them the Calvinistic religion to which they adhered most rigidly. There came at the same time many Maryland Catholics and Episcopalians and others; but none of them could assert themselves so strongly or impress their ideality so thoroughly upon their neighbors as the Presbyterians of Scotland and Ireland. The French Catholics, however, who founded and built Fort Duquesne, have the honor of holding the first religious service at this place. This was kept up with the characteristic regularity of that church until the fort was taken by the English.

The reader has not forgotten of the burning of Fort Duquesne on Friday afternoon, November 24, 1758, and that on Saturday, November 25, the place was occupied by General Forbes and his army, they reaching the fort late in the

evening. The following day an order was issued by the general naming Sunday, November 26, the second day after their arrival, as "a day of public thanksgiving to Almighty God." Rev. Charles Beatty was a Presbyterian minister, and was in this capacity as chaplain of Colonel Claphan's regiment. The distinction of preaching the first thanksgiving sermon, and indeed the first protestant sermon at Pittsburg, therefore, fell to him. Elsewhere we have spoken of Rev. Beatty and Rev. George Duffield being sent to Fort Pitt to ascertain what could be done for the spread of the gospel in this western country. They found a chaplain named McLagan, but there is no evidence of the presence of other ministers. Beatty and Duffield returned to the East, and perhaps through their recommendation Rev. Anderson was sent to Pittsburg, and a provision was made to extend to him such financial aid as he needed in his work. But it must not be understood that his services were intended to be confined to Pittsburg alone, for there were then perhaps as few as a hundred people there, and all of the early ministers in Western Pennsylvania traveled over vast sections of country. To illustrate this, in 1769, the Philadelphia and New York synod ordered the Presbytery of Donegal "to provide the western frontier with ten Sabbaths of ministerial labor." This order was doubtless complied with, but there is no record of it except the minutes of the synod ordering it. The minister who came here first to remain and labor among the people was Rev. James Finley, who crossed the mountains in 1772. He did not remain at that time, but preached irregularly all over Western Pennsylvania, and at length became the regular pastor of Round Hill Rehoboth Church, in Westmoreland county, in 1773. In 1774 James Power visited and preached in several places in Westmoreland county, and in 1776 brought his family with him. His field was limited to the settled districts of Western Pennsylvania, but later he became the regular pastor of Sewickley and Mt. Pleasant, in Westmoreland county. Rev. John McMillan was also a pioneer minister here, though he resided in Washington county, having come there from the East in 1776. In 1778, when the danger from Indian raids had somewhat subsided as he thought, he brought his family West and after that remained here. In 1777 Rev. Thaddeus Dodd came West as the regular pastor of Upper and Lower Ten Mile Creek Churches, in Washington county, and labored generally throughout this region until his death in 1793.

Rev. Joseph Smith came also to Washington county, working at Cross Creek and Buffalo in 1780, and remained here until his death twelve years afterwards. These five men, Finley, Powers, McMillan, Dodd and Smith were the pioneers of Presbyterianism in Western Pennsylvania, and upon them fell the great work of establishing the church here. All of them were well educated, all but Finley having been graduated from Princeton College. They also combined their learning with wisdom, and were recognized as leaders of thought in the community in which they lived. All of them were strong sermonizers and eloquent men. They planted in the wilderness of South-

western Pennsylvania the seeds of a great religious revival which came with the closing years of the century. The minister of that day was supposed to be a teacher as well as a preacher, and each of these men took a deep interest in the cause of education, building school houses as well as churches. McMillan, Dodd, Power and Smith were moreover the fathers of the Redstone Presbytery, which was the first ecclesiastical organization of the Protestant church west of the Allegheny mountains. Their high standing enabled them to come out with great potency on the side of peace and order, and to, more than once, assist in maintaining good government as against the open revolts on the part of the lawless. Particularly was their restraining power felt in the Whiskey Insurrection, the destruction of which would have been much greater had it not been for their sturdy opposition to all law breaking, though no minister dared to favor the excise law itself. When John Jay negotiated the treaty with Great Britain in 1794, Western Pennsylvania bitterly opposed its ratification, claiming that it sacrificed to England some of their undoubted rights. The friends of the measure at once sought support of Dr. McMillan to uphold the terms of the treaty, this being thought the best possible way to quiet the growing opposition. One of the leading men called him Cardinal McMillan, because of the influence he exerted throughout the community on this secular question. A politician wrote of this influence as follows: "The obtaining of the patronage of Rev. John McMillan, whom I denominate the patriarch of the western church, was a great acquisition. It secures our flanks properly."

The Redstone Presbytery was organized in 1781. It included all the territory west of the Allegheny mountains and north of Virginia and Kentucky. This is seemingly a very large section of country, yet there were but few settlers west of Pittsburg. The organization arranged for a first meeting of the Presbytery to be held at Laurel Hill Church, but when the time came it was held at Pigeon Creek, because the absence of some of the members, who by reason of the incursions of the savages, were unable to attend at Laurel Hill. The next meeting was appointed to be held in April, 1782, but because of the Indians hanging about, it was not held at all. Most of the communicants of the Pittsburg church at the time were Scotch-Irish or of Scotch-Irish extraction. They had all the characteristics of the race, and were very largely engaged in agricultural pursuits. They lived almost entirely to themselves, for there were scarcely any means of communication with the outside world except by pack-horses over the long winding path across the mountains. Fayette, Washington and Westmoreland counties were partly settled before the log cabins around Fort Pitt attracted many permanent settlers, but with the change which came over Pittsburg in 1784, when the new plan of the lots was laid out, came many settlers not only for Pittsburg but for the land lying near-by as well. With that came a desire for religious instruction, for at a meeting of the Redstone Presbytery held at Buffalo on April 13, 1784, it is recorded in the minutes that "supplication for supplies" were presented

from Muddy creek, the south fork of Ten Mile creek, from Robinson's Run and from Pittsburg. The day following the Presbytery took cognizance of this request, and Rev. Joseph Smith was appointed to "preach at Pittsburg the Fourth Sabbath of August." This was not the first move in this direction, for there had been services held in various parts of the country, particularly in the southern part. The churches of Lebanon and Bethel were organized, and in 1781 Rev. John Clark took charge of them as a supply, and in 1783 became their regular pastor and remained with them until 1789. He died in 1797 at the age of seventy-nine years. These churches were the largest churches in Allegheny county. In 1784 and 1785 the Presbytery at Redstone supplied an occasional minister for Pittsburg. In the fall of 1785, Rev. Samuel Barr, who had been licensed by the Presbytery of Londonderry, Ireland, came to Pittsburg and began preaching. At that time he was not sent here by the authority of the Redstone Presbytery, nor did he give his entire attention to Pittsburg, for in addition to ministering to the people here he preached also to a congregation of Presbyterians afterwards known as the Beulah Church, and to another small congregation in Pitt township. On September 29, 1787, The Presbyterian Congregation of Pittsburg was incorporated by an act of the legislature. The Penns had deeded two lots in their newly laid-out plan for a church. This was done "on the consideration of five shillings as well as the laudable inclination they had for encouraging and promoting morality, piety and religion in general, and more specially in the town of Pittsburg." A building of squared logs was erected at once. We have referred to it elsewhere and to the lottery scheme that was adopted by the congregation to pay for it. This log church served them for some years until a brick edifice took its place. Still later it was replaced by a more imposing structure.

Samuel Barr became a member of the Redstone Presbytery, and in 1789 removed from Pittsburg to Delaware, where he was engaged by another congregation until his death in 1818. The pulpit he left vacant they filled by supplies for eleven years. The congregation did not grow rapidly in the first sixteen years of its existence, though the churches surrounding Pittsburg had added greatly to their strength. In 1793 the Redstone Presbytery had so increased in churches and in church membership that the Synod of Virginia, under which it had been governed since 1788, concluded to create a new Presbytery to be called the Presbytery of Ohio. It included the territory north of Virginia and Kentucky, west of the Monongahela river and west of a line running through Pittsburg to the present site of Erie, or Presqu' Isle, as it was then known. Pittsburg and Alleghenytown were left in the Redstone Presbytery. The first meeting of the Ohio Presbytery was held at Buffalo on October 22, 1793. Dr. John McMillan was moderator, and Rev. John Brice was elected clerk. From the Presbytery of the Ohio, the Presbytery of Erie, which included all the territory in Pennsylvania north of the Ohio and west of the Allegheny river, was formed on October 2, 1801, by the Synod of Virginia. In May, 1801, the Synod of Pittsburg was formed by the General

Assembly, and embraced the three Presbyteries of Redstone, Ohio and Erie. The Presbytery of Lancaster, Ohio, and of Steubenville, Ohio, were formed respectively on October 7, 1808, and October 8, 1819, but they did not interfere with the territory embraced within the present limits of Pittsburg. On October 4, 1832, all parts of the Presbytery of Redstone situated north and west of the Ohio and Allegheny rivers, with the ministers John Anderson, Francis Herron, Joseph Stockton, Robert Patterson and Elisha P. Swift, with their congregations, were united by the Synod of Pittsburg to the Presbytery of Ohio. Though the limits of the Erie Presbytery in 1801 had included the town of Allegheny, yet it had remained in the Redstone Presbytery until the last change of October 4, 1822. Presbyterianism grew rapidly in and around Pittsburg from that time on. In 1837 and 1838 the third and fifth Presbyterian churches of Pittsburg seceded, and with several other churches organized the Presbytery of Pittsburg (new school). This Presbytery, with other new school Presbyteries formed the Synod of Pennsylvania (new school). The Synod of Pittsburg in October, 1853, formed the Presbytery of Allegheny City. It included that part of the Presbytery of Ohio which lay north of the Ohio and the Allegheny rivers. It remained under the Synod of Pittsburg for several years, when the Synod of Allegheny was created, which was supplanted later by the Synod of Erie. Shortly after the reunion of 1870, the General Assembly changed the bounds of the Presbytery and included in it certain churches of the Reformed Presbyterians of Pittsburg, and changed the name to that of the Presbytery of Allegheny.

In 1870 there was brought about a reunion of the new and old school divisions of the church. By this reunion the name of the new school, which was the Synod of Western Pennsylvania, was abandoned, and the name of the old school branch, which was the Synod of Pittsburg, was retained. At the same time the name Presbytery of Ohio of the old school was given up, and that of the new school became the Presbytery of Pittsburg. The Presbyterian churches of Pittsburg and Allegheny county were now included in four Presbyteries known as the Pittsburg, the Allegheny, the Redstone and the Blairsville Presbyteries.

We have referred to the seeds sown by the early ministers which sprung up and ripened into a great religious revival in the first years of last century. This revival made an important epoch in the history of Pittsburg churches, and has generally been called the "Revival of 1800." Its central point was around Pittsburg, but its influence was felt all over Western Pennsylvania. Rev. Robert Steel had some years previous to that time come to Pittsburg and had begun work in the pulpit of the old First Church. It is said he had fled from Ireland because of religious persecutions and that he could not obtain the papers from his home church that were necessary to admit him to the membership of the Presbytery. The church was then administered under the strictest rules, and he was neither admitted to the Presbytery nor installed

in the First Church of Pittsburg until 1802. During the same year a number of members withdrew from the First Church and began the promotion of the Second Presbyterian Church of Pittsburg. The same year became further memorable because of the organization in the First Church of Pittsburg of the Western Missionary Society, which afterwards accomplished a great work under that name and became many years later The Board of Home Missions of the Presbyterian Church, under which name it has long since achieved a national fame and performed a work of untold value in church history. For nearly a quarter of a century the First and Second Presbyterian churches of Pittsburg stood in the forefront of Presbyterianism in Western Pennsylvania, and the churches in the county kept pace with them in their progress. All this time churches were widely separated for the population was extremely sparse. In 1800 there were only eight churches of the Presbyterian faith in Pittsburg and in all of Allegheny county. These were the First and Second Church of Pittsburg, and the churches at Bethel, Lebanon, Mingo, Montours, Plum Creek and Beulah. Highland Church was reported to the Presbytery in 1803 as being "unable to support a minister," and a like report was made in 1807 of the congregation of Plains, and in 1808 the Sewickley congregation is mentioned as unable to support a minister. In 1814 the church of Bethany, in Alleghenytown, now the First Presbyterian Church of Allegheny City, and the Pine Creek Church were formed. Duff's Church, afterwards called Fairmount, was strong enough only to ask for and receive a supply. In 1828 the East Liberty Presbyterian Church and the church of Cross Roads were formed, and in 1833 the Third Presbyterian Church of Pittsburg was formed. While the organization of these churches seemed to come slowly, it is probable that they kept pace with the population of Pittsburg and of Western Pennsylvania. Internal improvements made by the state and discussed else where in these pages, added greatly to the population of Pittsburg and vicinity, and Pittsburg churches multiplied accordingly.

The work in the church in Pittsburg has not by any means been confined to the upbuilding of congregations and the erection of church edifices within the city. They have sent immense sums of money to educate and christianize the heathen in foreign lands, and likewise have contributed to the care of the homeless and poverty stricken within their own gates. The city has the honor, as we have intimated, of giving birth to the Board of Home and Foreign Missions of the Presbyterian Church in the United States. The Board of Missions to Educate Freedmen, which became necessary after the close of the Civil war, was not organized in Pittsburg, but had its home there, and was very largely patronized by the Presbyterian churches of the city. In this connection, the old First Church of Pittsburg deserves a further mention. Not only was the Western Missionary Society, which became the Board of Home Missions, formed within the walls of this church and by this congregation, but in 1831 the Western Foreign Missionary Society, the fore-runner of the Board of Foreign Missions, was organized by them. Walter B. Lowrie

was then chief clerk of the United States senate, which position he resigned in order to become the first treasurer and secretary of the Western Missionary Society. For many years the old First Presbyterian Church, and its successive edifices, served as a headquarters and home for many causes, both ecclesiastical and secular, which sought to upbuild the spiritual and moral interests of the cities of Pittsburg and Allegheny, and of Western Pennsylvania generally. The First Church also played a prominent part in the formation of Washington and Jefferson College. The Western University of Pennsylvania was formed by this same First Church, and the Western Theological Seminary, now taking a high rank among the schools of its character in the United States, was organized by the First Church, and its first classes recited under its roof before the organization had money enough to even erect a building. The Allegheny County Bible Society was organized in the same church in 1818. Hon. Harmar Denny, one of the leaders, whose life and character are spoken of elsewhere, was its first president. The pastor then was Dr. Francis Herron, justly renowned for his piety and ability. For forty years he stood at the head of the Presbyterian ministry in all their eleemosynary work. He had associated with him some very able men, such as Elisha P. Swift, D. D., of the First Allegheny Church, and David H. Riddle, D. D., of the First Presbyterian Church, and others who worked zealously under his direction in all matters intended to promote the welfare of the church and the community. These organizations were brought about because of the zeal and prominence of the founders and early members of the church. Some of this spirit at least has been retained by its later membership, though it is not our province to write particularly of the church work of the living. As evidence of this later zeal of the church we have but to mention the Pennsylvania Female College, and the Shadyside Academy, both of which were founded by this church in the interests of higher education of the young men and women of the cities. We do not pretend in this brief sketch of the church to enumerate all that it has accomplished. Much was expected of them for they, for a century past, have numbered among their members men and families of great wealth, of high social standing and intellect. Even among its first members, those who met to worship in the squared log structure of 1787, were men with whom the reader of these pages cannot help but be familiar. They were Gen. Jaines O'Hara, Major Isaac Craig, Major Ebenezer Denny, Col. Stephen Bayard and Col. John Gibson—men without whose names the pioneer history would be tame indeed. The first elder of the church was Capt. John Wilkins, one of the sturdy citizens of his day, who had come here from Carlisle, and remained a pillar in the church for the remainder of his days. His son, William Wilkins, born in 1779, was brought up in the church. He was a lawyer, afterwards became deeply interested in the finances and manufacturing interests of the city, was judge of the courts, a member of congress and of the United States senate, was a minister to Russia and Secretary of war in President Tyler's cabinet. Judge Alexander Addison, who was noted in the bench and

bar history of Pittsburg, was for a life time a most active member, while other early members were Judges Johnston, Wallace and Snowden. An examination of the records of the church reveals the fact that a great many of Pittsburg's most eminent lawyers, judges, manufacturers and business men were members of this First Presbyterian Church of Pittsburg. Well might the church perform a prominent part in the upbuilding of the moral and intellectual side of the city. They are to be congratulated, however, for following the precepts of such men as McMillan, Patterson, Power, Dodd and in a later day of Herron, Riddle, the Swifts, Howard, Jacobus, Beatty, Wilson and others. These men,

HIGHLAND AVE. PRESBYTERIAN CHURCH

one and all, ministered to a laity highly endowed with grace, wisdom and wealth, and we have but barely set forth the results of their teachings as shown by the work wrought out by the membership.

PRESBYTERIAN CHURCHES OF GREATER PITTSBURG.

The following list shows the churches of to-day (1907), with the date of organization of the earlier ones, together with the present membership, wherever the facts could be correctly obtained: 1778, Lebanon; 1778, Bethel, membership 290; 1784, First Presbyterian, membership 1,304; 1778, Montours, bership 189; 1802, Second Presbyterian Church of Pittsburg, membership 1,599; 1814, Bethany, membership 359; 1814, First Presbyterian Church of Allegheny, membership 640; 1828, East Liberty, membership 1,520; 1833, Third Church of Pittsburg, membership 1,007; 1833, Seventh Presbyterian Church of Pittsburg; 1840, Valley Church, membership 213; 1841, West Elizabeth Church, membership 88; 1843, Long Island Church; 1843, Second Presbyterian Church of Allegheny; 1847, Eighth Presbyterian Church; 1850, Sixth Church, membership 378; 1851, First Church of Birmingham; 1852, Mans-

field Church; 1854, Central Church of Allegheny, membership 484; 1857, Mt. Washington Church, membership 490; 1863, Forest Grove Church, membership 107; 1863, North Church of Allegheny, membership 431; 1863, Mt. Olivet, membership 100; 1866, Wilkinsburg, membership 1,148; 1866, Bellefield, membership 531; 1867, Shadyside, membership 637; 1868, Grace Memorial (colored), membership 185; 1869, Hazelwood, membership 532; 1870, Swissvale, membership 239; 1871, Fourth Presbyterian of Pittsburg, membership 856; 1872, Braddock; 1874, Homestead, membership 576; 1877, Knoxville, membership 567; 1877, Bethel of Allegheny; 1879, Riverdale, membership 150; 1879, Hoboken, membership 156; 1881, Park Avenue, membership 459; 1883, Forty-third Street Church of Pittsburg, membership 438; 1884, Central Church of Pittsburg; Highland of Pittsburg, membership 330; Westminister of Allegheny, membership 256; East End, membership 203; Tabernacle Pittsburg, membership 599; McCandless, membership 184; Wilkinsburg Second Presbyterian Church, membership 465; Friendship Avenue, Pittsburg, membership 260; Greensfield of Pittsburg, membership 311; West End Pittsburg, membership 255; South Side Pittsburg, membership 760; Brighton Road, Allegheny, membership 260; Aspinwall, membership 260; Calvary of Wilkinsburg, membership 265; Apple Avenue, Pittsburg, membership 140; Watson Memorial, membership 357; West View, membership 48; Herron Avenue, membership 267; Homewood, membership 961; Lawrenceville, membership 288; Port Breeze, membership 495; Oakland, membership 332; McKinley Park, membership 136; McClure Avenue, Allegheny, membership 800; Allegheny Central, membership 484; Hoboken, membership 156; Greenfield, Pittsburg, membership 311; Duquesne, membership 195; First German of Allegheny, membership 79; Pittsburg Grace Memorial. This makes a total of 67 Presbyterian churches within Greater Pittsburg, with a membership of more than 25,000 communicants.

THE UNITED PRESBYTERIAN CHURCH.

The United Presbyterian Church of North America, almost purely Scotch in its theology, ancestry and traditions, was brought into existence, as it is known now, by a union of the Associate and Associated Reformed Presbyterian churches at the old city hall in Pittsburg on May 26, 1858. The two churches had practically the same doctrine and forms of worship, and in the union neither of them modified a single important principle of its creed or form of worship. Yet the union was long deferred and brought about only after much negotiation. As one of the destinctive branches of Presbyterianism holding the Calvanistic faith, it dates its origin back to the latter years of Charles II. and James II. In the United States the church heads at many fountains. While those at the union in 1858 had gathered into one fold the two main branches, the Associate and Associate Reformed, the general church traces a considerable portion of its followers back to the Scotch Covenanters or "mountain men" and "hill men," who, following the battle of Bothwell and

the outlawery of the Stuarts, held their conventicles for worship in the hills under the guidance of Cameron, Cargill and Renwick, leaders, who soon afterwards were forced to wear the crown of martyrdom. Their followers are sometimes called "Covenanters," but they did not assume a distinct organization until 1743. The Associated Church had seceded from the church of Scotland in 1733. Members of these churches came from Scotland in the first half of the eighteenth century, and in 1753 ministers named Alexander Gellatly and

FIRST UNITED PRESBYTERIAN CHURCH, FIFTH AVENUE, OAKLAND

Andrew Arnot came to the eastern part of Pennsylvania and formed a Presbytery on the 2d of November. In 1751 John Cuthbertson had been sent over by the Reformed Presbyterians of Scotland, and began to measure this field for ministerial labor. He was joined by Revs. Matthew Lind and Alexander Dobbin, in 1773, and in company with a number of ruling elders met on March 10, 1774, near Harrisburg to organize the Reformed Presbyterian Presbytery of America. In 1782 nearly all the members of these church organizations united under the name of the Associated Reformed Church, thus retaining a part of the name of both churches. Two preachers named Marshall and Clarkson declined to unite with the others. They increased their strength in both membership and ministers, and became somewhat powerful for their day. All the Reformed ministers entered the United Church, but many of the members throughout the Presbytery refused to enter, and secured ministers from Scotland and Ireland. Rev. James Reed came from Scotland in 1789 to inspect the field, and returned in 1790. Rev. McGarrah was sent from Ireland in 1791 to look after the scattered members, and was assisted by Rev. William King, of Scotland, in 1792. Both of these ministers acted under the Presbytery of Scotland, but the increasing membership and the securing of several ministers warranted them in forming a new Presbytery in 1793.

The Synod of the Associated Reformed Church of North America was organized at Philadelphia on November 1, 1782, with Dr. John M. Mason as moderator. There were six ruling elders present and these, with nine ministers, composed the Synod. Three Presbyteries were represented, namely: The Associated Presbytery of New York, the Associated Presbytery of Pennsylvania and the Reformed Presbytery. These associations, though they increased greatly in strength were practically unchanged in names until the union. The first Presbytery consisted of the ministers and churches in Eastern Pennsylvania. The Second Presbytery included the following ministers, namely: Matthew Henderson, Alexander Dobbin, John Rodgers, Matthew Lind, John Murray and William Logan, and all churches west of the Susquehanna river. The efforts to unite, which culminated in the union of 1858, had extended over a period of forty years or more. Nearly all the ministers of both bodies were present, and the union was acted upon with a surprising unanimity and harmony. The results in the last fifty years have fully justified the wisdom of those who labored for the union. The church has not only prospered but has enjoyed much greater peace and harmony than the two branches did prior to that when they were separate organizations. The union was effected on the basis of adherence to the Westminster Confession of Faith with the exception that that part of it which referred to the civil magistrate was made to conform to the accepted theory of church and state in our form of government. In addition to the Confession the church set forth her principles on certain subjects not contained in it. These were Psalmody, Communion, Slavery, Secret Societies and Covenanting. The original principles of the church on Psalmody and Secret Societies have been greatly modified in the last fifty years. For the decided stand the church took against slavery, even in the earlier days of the agitation, it deserves a great and enduring honor. The Associated Church at the time of the union in 1858, had 198 ordained ministers, 193 congregations, and 23,505 members. The Associated Reformed Church had 221 ordained ministers, 367 congregations, and 31,284 members. In forty-nine years they have increased greatly, as will be seen below.

The United Presbyterian Church is stronger in Allegheny county and in Pittsburg and Allegheny City than it is any other section of the United States in proportion to the population. In 1788 there were but two or three small congregations representing both the Associate and the Associate Reformed churches. One of these was called Bethesda, and Rev. Matthew Henderson was its pastor in 1785. Robinson Run was organized about the same time. As early as 1774 an application was made from Pittsburg for assistance in dispensing the gospel, but the Presbytery was small and weak, and nothing was done towards founding the church for some years afterwards.

The United Presbyterian churches of Greater Pittsburg were organized and have a membership as indicated by the following numerals:

First Church of Pittsburg, organized 1801, present membership 563; Second Church of Pittsburg, 1815, membership 225; Third Church of Pitts-

burg, 1831, membership 495; Fourth Church of Pittsburg, 1837, has membership of 365 (was re-organized in 1849); Ninth Church of Pittsburg, 1841, membership 282; Eleventh Church of Pittsburg, 1847, membership 145; Sixth Church of Pittsburg, 1856, has 1,137 members; Fifth Church of Pittsburg, 1859, merged with Third Church in 1899; Seventh Church of Pittsburg, 1860, membership 310; Eighth Church of Pittsburg, 1868, membership 150; Tenth Church of Pittsburg, 1872, membership 104; Thirteenth Church of Pittsburg, 1888, membership 125; Homewood Church, 1894, membership 560; Knoxville, 1899, membership 140; Lincoln Avenue Church, 1902, membership 236; Mt. Washington, 1884, membership 218; Shadyside, 1890, membership 813; Thirty-third Street Church, 1889, membership 132; West Pittsburg, 1904, membership 90; Brinton Avenue, 1903, membership 96; Allegheny First Church, 1831, membership 495; Allegheny Second Church, 1837, membership 480; Allegheny Sixth, 1849, membership 390; Allegheny Third, 1854, membership 240; Allegheny Fourth, 1860, membership 475; Allegheny Fifth, 1862, membership 466; Allegheny Seventh, 1880, membership 228; Allegheny Eighth, 1890, membership 648; Twelfth Church of Allegheny, 1901, membership 93; North End Allegheny, 1903, membership 109; Ninth of Allegheny, 1891, membership 260; Tenth of Allegheny, 1895, membership 375; Eleventh of Allegheny, 1897, membership 295; Chartiers, 1883, membership 161; Swissvale, 1903, membership 114; Braddock, 1864, membership 525; Homestead, 1888, membership 204; Grafton, 1905, membership 93; Wilkinsburg First Church, 1882, membership 550; Wilkinsburg Second Church, 1891, membership 452; Oakdale, 1889, membership 172; Mt. Lebanon, 1804, membership 255; Ingram, 1887, membership 255; Carnegie, 1856, membership 484; Sheridan, 1901, membership, 160; Bellevue, 1872, membership 430; Emsworth, membership 205; Sewickley, 1869, membership 258; Aspinwall, 1893, membership, 216; Etna, 1868, membership 230; Avalon, 1893, membership 344; Leetsdale, membership 104. The total membership in this group of United Presbyterian churches in Greater Pittsburg is 16,732. The total number of churches is fifty-one.

THE CHRISTIAN CHURCH—FORMERLY CALLED DISCIPLES.

In the first quarter of last century came an agitation in the religious world, which eventually culminated in the formation of the Christian Church. At the opening of the century there were several small societies in this country, one in Kentucky, one in New York City, and one in Pittsburg, whose avowed purpose was to discard human creeds and build their church organization on the scriptures. There was a similarity in these three organizations, but they were not in any way linked together nor had they any communication worthy of notice with each other. To bring these separate organizations together so that they might co-operate was, in a measure, the life work of Thomas Campbell and his son, Alexander Campbell, both of whom labored largely in Western Pennsylvania, Ohio and Virginia. Thomas Campbell was a minister in the Seceder Church in Ireland, who came to Washington county in 1808.

He soon brought upon himself the disapproval and later the censure of the Presbytery to which he belonged, because of certain well defined ideas which he was advocating. He was both eloquent and educated, and at all times had the highest respect of his hearers, though many of them disagreed with him. His son Alexander Campbell was also an Irish minister, and came here when his father was first attracting the attention and receiving the censure of the religious element in this country. The son was more fearless, more eloquent, and doubtless an abler man generally than his father. Without intending to do so he assumed the leadership of the new movement, which was called the Reformation. The followers of these men called themselves "Disciples in Christ," and called the organization which they effected the Christian Church. In this way came the two names by which the church is sometimes designated. Being followers of Alexander Campbell many of their opponents called them Campbelites. The main force of the movement was against sectarianism, and they sought rather to have all people united in one religious organization, whose guiding star was the New Testament. They protested vehemently against human authority being written in the religious faith of the church. They rejected all human creeds, contentions, books of discipline, decisions of synods, councils, etc., and advocated the New Testament as the only and all-sufficient document on which all followers of Christ could be united. They claimed that they were teaching the gospel as taught by Christ and the Apostles, and that in this way alone, regardless of what Luther, Calvin or Wesley taught, could a religious unity of the people of the world be brought about. The movement grew very rapidly, and has continued to grow for nearly a century, until now they are found in nearly every section of the United States, with perhaps their greater strength in the southern states. They have many religious periodicals and magazines and are decidedly a growing religious power among the churches of America. The Christian Church has done well in the missionary field both at home and abroad.

The first church in Allegheny county was established in Allegheny City in 1835. A number who were members of an independent Baptist congregation, which had been established by Rev. George Forister in 1810, withdrew from it and organized the first Christian Church in the city on the second Sunday of March, 1835. They worshipped first in a one-story brick building close to the Allegheny river, near the Sixth street bridge. The church seated about three hundred people, but was burned down in 1859, and for nine years their services were held in a rented hall, Excelsior Hall being used most of the time. In 1868 a church was built on Arch street and Montgomery avenue. The following ministers have served as regular pastors of it: Samuel George, William James, Walter Scott, J. S. Benedict, W. J. Petigrew, B. F. Perkey, Robert Ashworth, Thomas Farley, Theobald Miller, W. S. Gray, Isaac W. Tener, T. C. McKeever, Joseph King, William F. Cowden. The congregation has also been ministered to frequently by many of the great leaders of the church from different parts of the country. Samuel George, as above named,

preached there sixteen years, while Joseph King remained twenty-two years, and to these two men more than to any others is the church indebted for its success. Many of its members have gone into other congregations of the same faith. A mission school was established in 1882 on Fifth avenue, Pittsburg. A lot was purchased by them soon after for thirty-five hundred dollars, and buildings erected on it.

The Peters Creek Church was established in 1836, being organized by Edward Riggs with but six members. Services were held in his house until 1839, when a church was built. It was a rural church and perhaps comes scarcely within the limits of a description of the Pittsburg churches. Both of the Campbells have frequently preached there in the earlier days. The Christian Church at Braddock may be said to date back to 1840, for about that time a few disciples who lived there held meetings in a school house. They also held a meeting in a grove nearby at which Alexander Campbell himself officiated and preached. Soon afterward a church was organized, and Thomas Strathren was for many years both leader and pastor. In 1845 the organization built a church largely through the agency of Isaac Mills. Among its more noted preachers may be mentioned A. S. Hale, W. B. Higbee, Eli Regal, James Dorsie, L. D. Brown, J. L. Pinkerton, George P. Slade, E. S. Bosworth, W. S. Lane and others. In 1874 their church was burned, and their being no insurance, the loss fell very heavily on them. It was soon rebuilt in part, but was not completed until 1886. Hazelwood has also a Christian Church, which was organized in 1868 with nine members. Rev. O. A. Bartholamew was the first pastor and was followed by Revs. Allanson Wilcox, George P. Slade, J. L. Pinkerton, Levi Marshall, H. K. Pendleton, etc. It is now a fine church, and has increased steadily though not rapidly. The Christian Church at McKeesport was organized by George P. Slade on February 17, 1879, with fourteen members. Mr. Slade was followed by E. W. Gordon, L. C. Jackson and W. H. Applegate. The Christian Church at East End was practically founded on April 7, 1855, by Mr. William F. Cowden, pastor of the Christian Church in Allegheny City. On that day he began preaching and holding services at the residence of John M. Addy. He continued there for a year when a society was formed that was able to buy a church property on Emerson street for twenty-five hundred dollars. On January 3, 1886, the church was rededicated and the organization had then about thirty members. D. T. Butler was secured as a permanent pastor. In 1887 they purchased a lot on the corner of South Highland and Adler streets for five thousand five hundred dollars, and on this they moved their former house of worship, and by remodeling it made it a very attractive edifice. In 1884 a minister began regular preaching in Mansfield. He was followed by Samuel Williams also a member of the Allegheny Church. In 1887 a mission was formed there and a church was built.

The Christian—Disciples of Christ—churches of Greater Pittsburg were organized and have the membership indicated by the following:

Allegheny First, organized 18—, present membership 1,547; Allegheny Observatory Hill, 220; Allegheny Calvary, 200; Beechview, 88; Bellevue, 333; Braddock, 311; Carnegie, 1882, has 190 members; Crafton, 1902, has 78 members; Dravosburg, organized 1903, has 85; Duquesne, 150; Homestead, 139; Homeville, 1905, has membership with Homestead; McKeesport First, 1879, has 343; McKeesport Foreigners, 1904, membership at McKeesport; McKeesport Bryn Mawr, 1907, has 40; McKees Rock, 1899, has 317; Natrona, has 32; Pittsburg Central, 1882, has 550; Pittsburg, Belmar, 1899, has 190; Pittsburg East End, has 400; Pittsburg, First, 300; Pittsburg, Fourth, 1890, has 125; Pittsburg, Herron Hill, 1904, has 142; Knoxville, has 450; Squirrel Hill, 1901, has 250; Sheridan, 1907, has 23; Turtle Creek, 1899, has 165; Wilkinsburg, 1907, has 372.

The total number of churches in Greater Pittsburg is twenty-eight, with 7,250 communicants. The total number of churches in the United States for this denomination is 11,301, with 1,283,416 communicants.

CHAPTER XVI.

CHURCHES CONTINUED.

The Methodist Episcopal Church—The Evangelical Lutheran Church.

The Methodist Episcopal Church was founded in 1766, by John Wesley, who had been a clergyman of the Established Church of England. In the same year the first meeting among Methodists was held in New York, at the home of Phillip Embury, who had been a preacher in Ireland. Mrs. Barbara Hick undertook to gather a congregation and found four persons willing to attend. She and the preacher increased the number to six and this was the unpromising beginning of the church in America. Three years later John Wesley sent two preachers to the colonies to labor in the interests of the church. The growth of Methodism was for some years confined to the eastern shores but the itinerary system adopted by the authorities of the church relative to its ministry, soon began to push its representatives southward into Virginia, the Carolinas and Georgia. The Revolution put a decided check to its extension for many years, for the reason that the preachers were nearly all Englishmen. Many of them were actually Tories in their sympathies and those who were not Tories were mostly under the gravest of suspicions. This greatly weakened their forces in gathering hearers and adherents.

Tradition, which seems to be well authenticated, teaches that Mrs. Mary Gaut, widow of a Methodist, came from Ireland in the spring of 1784 to the home of her brother, Thomas Wilson, in Pittsburg. Through her influence the three daughters of her brother were induced to join her religious devotions, which consisted of singing, prayer and the reading of one of John Wesley's sermons. These were probably the first Methodists and their meetings the first Methodist services held in Pittsburg. Shortly after this the entire family moved away from Pittsburg and these services ceased. The first Methodist sermon preached in Pittsburg was by Rev. Wilson Lee in the autumn of 1785. He was one of the preachers of the Red Stone Circuit and on this occasion preached in a tavern on Water street near Ferry street. There was no organization formed then, nor were there regular services held here immediately following this. Methodism was, however, pushing westward and a conference of preachers was held at Uniontown in July, 1788. This conference organized the Pittsburg Circuit and appointed Rev. Charles Conway as its pastor. The

circuit embraced the town of Pittsburg and all the surrounding community. After laboring one year, Conway reported no members. He was appointed pastor of the same circuit again in 1789, and at the close of the second year, reported ninety-seven members under his entire charge, but there is no reason for supposing that any of them were in Pittsburg. Indeed it is supposed that none of them were.

On July 19, 1789, Bishop Asbury came to Pittsburg from the East. In his journal, he says he "passed through Greensburg and dined at Rowlett's, six miles west from Greensburg, thence set out and reached Pittsburg twenty-five miles; I preached in the evening to a serious audience." On Monday, July 20, he preached again and "had great zeal, and the people were very attentive, but alas! they are far from God, and too near the savages in standing and manners. We were not agreeably stationed at ——'s, who was continually drunk and our only alternative was a tavern." On Tuesday, the 21st, he preached again and says in the journal "we were crowded, and I felt more courage. The night before the rude soldiers were talking and dancing about the door but now they were quite mute. This, I judged, might be owing to the interference of the officers or magistrates." No mention is made in his journal where he preached, nor of there being any members of the church in Pittsburg. The journal says that the day following they left Pittsburg, by the Allegheny, and went to Wilsons, doubtless the first Methodist family of Pittsburg, to whom we have referred above. The Red Stone Circuit was one of the many included under the government of the Baltimore conference. Two, preachers, John Cooper and Samuel Breeze, who had some thirty preaching places, many of which were along the Youghiogheny and Monongahela rivers, were sent to this section of Pennsylvania. A Methodist Society was formed by them at the junction of the rivers where McKeesport now stands. In that society was Benjamin Fell, with his wife and ten sons and daughters, a widow named Beazell and her large family. These formed the nucleus of what afterward grew into a large congregation.

This was the extent, so far as authentic records show, of the work done by the Methodists in Pittsburg up until 1796, and up until that time there was no regularly organized congregation there. In 1796 John Wrenshall came from England and engaged in the mercantile business in Pittsburg. It would probably be more in keeping with the times to say that he started a small store on the corner of Market and Fifth streets. Many years before, while yet in England, he had become a believer in the doctrines of religion as advocated by John Wesley and had for some sixteen years been what was then known in the church as a local preacher, but was not ordained as a minister nor did he at that time aspire to become such. He was a very pious man who had acquired considerable information and was thoroughly in earnest in all his undertakings. On his arrival in Pittsburg he found the town without a Methodist Society and at once endeavored to gather the people of that persuasion for religious service. In the absence of one more competent to do so, he preached

himself, as he had often done in England. He also kept a journal, which has come down to us, and from it it is learned that these meetings were held in an old log building formerly used by the Presbyterians as a church, but which at that time had been abandoned by them. This log building stood on Wood street, near Sixth, and on the same lot the Presbyterians afterward built a church which was occupied for many years by the learned and loved Dr. Francis Herron. It is probable from the texts which Wrenshall took that his sermons were little else than simple talks on the importance of a religious life, but they were what the rustic people of that day needed. His meetings were well attended, even by those who were not believers in Wesleyanism. In his journal he says that many of the officers and soldiers of the garrison attended these services and that, moreover, the attendance increased with each month. But in a short time the assembling congregation found the door locked and a notice was given to Mr. Wrenshall that he could not use the house any longer. At that time Mr. Peter Shiras, a citizen of Pittsburg, owned or at least had some interest in old Fort Pitt, and he offered a room within the grounds to his neighbor in which to hold these meetings. The Society, if limited to those who were then real members, were Wrenshall and Shiras and their wives, Robert McHelmy and wife and daughter, Mrs. Ward, Mrs. Chess and James Kerr. They continued their meetings in that place until 1802, six years in all, when Shiras sold the Fort, or his interest in it, to General James O'Hara, and removed to his former home in the East. Shiras had in the meantime become a very important member of the Methodist society and his removal was deeply felt by the little congregation on the frontier. In his stead, however, came Thomas Cooper, Sr., and family, all of whom were Methodists, and who in the end more than made up for the loss they sustained in the removal of Shiras. Cooper had great energy and the power to infuse it into his fellows in the church. He became the class leader, as Shiras had been, and the society of Methodists at once began to increase. The church was reorganized but it was the same society founded in 1796, though after its organization in 1803 it grew more rapidly than it had before. Cooper was also an Englishman and a very devout Christian as well as a loyal man to his church. The regularly authorized preachers who came to Pittsburg in that day invariably made their homes for the time being, at Wrenshall's and afterward at Cooper's house. After the fort was sold and no longer a possible preaching place, a small one-story frame building in the rear of Wrenshall's store was fixed up and in this their services were held. All this time the circuit preachers came regularly to Pittsburg, and it is not supposed that Wrenshall preached except on occasions when the regular preachers were absent. The building in the rear of the store was not only very small but was equally inconvenient. Other places were secured but it seemed to be impossible to find a suitable place. For this reason Pittsburg was abandoned as a regular preaching place by the circuit preachers and the appointment was given by the Baltimore conference to McKeesport. The regular services in the town were kept up, however, and in 1807 Nathaniel

Holmes and Edward Hazleton and their families came from Ireland and became members of the Methodist organization in Pittsburg. They were men, each of them, of great earnestness and were well suited to impress the principles of their faith on the rude frontiersmen of Pittsburg. Thomas Cooper seems to have been a man of some prominence, for he lived in a large stone house on the corner of Smithfield and Water streets, opposite the present Monongahela Hotel. He offered the little society a room for public worship in his house, and accordingly in 1808 services were held there. It was arranged that a regular minister should visit Pittsburg each alternate Sunday and preach to the people, while on the other Sundays the services should be conducted by local preachers.

From the foregoing fragmentary references to the early church in Pittsburg it will be seen that the principal founder of the church was in reality John Wrenshall. His name should always be highly revered by Pittsburg Methodists. He was born in England, December 27, 1761, and came first to Philadelphia in 1794 and to Pittsburg in 1796. He was for forty-one years a local preacher in the church and was at all times its sturdy supporter. Bishop Asbury traveled a great deal over Western Pennsylvania then, and on most of his visits to Pittsburg made his home for the time being at Wrenshall's house. Later in life Wrenshall was ordained by the bishop and thus became a licensed minister but never took regular work in the church as a preacher. He was a medium-sized man who talked and sang well, though with a clearly marked English accent. He was the first American ancestor of a large and well-known family, among whom was Mrs. Ulysses S. Grant, who was his granddaughter. Wrenshall died on September 25, 1821, at his home on Fourth avenue, and was buried in a vault in the rear of the First Presbyterian Church, on Wood street. Probably next to him in point of honor as a founder of the church in Pittsburg properly comes Thomas Cooper. When he came to Pittsburg in 1803 he found a small, waning organization and by his work and energy brought to it new life and new hope and new strength. He was also an Englishman and led in the singing. Afterward he was an alderman in the city and lived until about 1850. Nathaniel Holmes and Edward Hazleton were early and enthusiastic Methodists who came here from Ireland. The church organization was, of course, very poor, too poor and weak perhaps to build a house of worship, else they would not have been driven from one place to a place still more inconvenient. With no settled house in which to worship, with no resident pastors to look after them, and finally with the preaching place taken from them and moved to McKeesport, it is a wonder that the society did not languish and expire. In 1803 Bishop Asbury visited Pittsburg and from his journal of Saturday, August 27, we quote: "We had a dry, sultry ride to Pittsburg. In the evening William Page preached. I spoke in the court house on Sabbath Day to about four hundred people. I would have preached again but the Episcopalians occupied the house. I come but

once in twelve years but they could not consent to give way for me. It is time we had a house of our own. I think I have seen a lot which will answer to build upon." Bishop Asbury was a man of great strength as a preacher. Nor must the reader suppose that the only good sermons the early Methodists of Pittsburg heard were preached by Bishop Asbury. In the list of regular preachers is found the name of the eccentric but renowned Valentine Cook. He was a kinsman of Captain Cook, the navigator and discoverer, and had been educated in Cokesbury College. He spent most of his life preaching to the frontiersmen of Pennsylvania, Ohio, Kentucky and Tennessee. Yet American Methodism has not had in all her history a more truly eloquent man than Valentine Cook. Here, too, often came McKendree, Henry B. Bascom, Asa Shinn, Thornton Fleming, Charles Elliott, Charles Cooke, John J. Swayzee, every one of whom were men of the highest order of intellect, who subsequently achieved national fame because of their eloquence in the ministry. Some of them, as will be seen later on, were regularly stationed here. Reference has been made here to the locking of a door of the old church to the struggling society and to the refusal of another congregation to give way to Bishop Asbury. This must not be misunderstood by the reader. The harmony between most churches which exists today and which is one of the strongest evidences of their true Christianity, was unknown in that day. All were struggling for a foothold and this of necessity engendered more or less rivalry among them. Wesleyanism was, moreover, a new doctrine then and the older churches regarded it with more than that suspicion which even now is felt toward the advocates of new and untried theories in religion.

In 1810 a lot situated on Front street, now First street, nearly opposite the Monongahela Hotel, was purchased and the long looked for building of a church was began. Whether this was the lot upon which Bishop Asbury had looked with favorable eye is not known to us. On August 26 the bishop came here and doubtless helped to lay the corner stone, for in his journal he says: "Preached on the foundation of the new chapel to about five hundred souls. I spoke again at five o'clock to about twice as many. The society here is increasing in numbers." The new building was a plain brick church, thirty by forty feet, and was perhaps finished and ready for occupancy late in 1810, for it did not require as much time to put up and finish the simple structures of that day as it does to complete the churches of our age. The church was unfortunately not large enough or perhaps the congregation increased more rapidly than was expected. At all events, in eight years three lots were purchased on the corner of Smithfield and Seventh streets and a large church was put up at once. It was completed and dedicated in 1818. It was also a brick church and, after the general church architecture of that day, had a gallery on two sides and on one end. It served them for many years, though the congregation grew rapidly. It was invariably called a meeting house. The year following its dedication, under the ministry of Rev. Samuel Davis, there came a great revival which aroused the entire

city, for city it was then since 1816, with a population which reached seven thousand, two hundred and forty-eight in 1820. Business of the city to a great extent was laid aside for a time during this religious awakening and the people gave their whole attention to religion. With this the membership was greatly increased and strengthened. The new accessions included many of the wealthy and cultured people of the city, though prior to that time the standing of the church generally in that direction was eminently respectable. The church grew and prospered greatly until 1827, when a series of internal troubles arose. In the language of its day it was styled "Radical Controversy," which appeared in many Methodist churches but was very manifest in Pittsburg, for indeed this was its centre point of warfare. There were reformers then as now, and the difficulty related entirely to the economic government of the church. The reformers demanded a lay representation in all the administrative bodies of the church. They also sought to abandon the office of bishop and presiding elder. Their opponents were satisfied with the progress of the church under the existing management, for its increase had indeed been more than could be reasonably expected. The difficulty became fiercer with each month until May, 1829, when the reformers engaged Rev. George Brown, who was then a promising minister at New Lisbon, Ohio, to come to Pittsburg and form a new and separate church organization. His coming carried with it his withdrawal from the Methodist Episcopal Church, and he came at once to the city. With a good deal of controversy the reformers withdrew and organized a separate church on June 24, 1829. The reformers were, of course, equal owners, so far as their numbers went, with the loyalists in the church building, and therefore claimed the privilege of worshipping in the same meeting house. This was accordingly granted them. They held their services at nine A. M. and three P. M. on Sundays, while the others worshipped at eleven A. M. and seven-thirty P. M. But this joint occupancy could not always last, and indeed seemed only to engender a more hostile rivalry between the two contending organizations. The reformers had perhaps a more showy minister and claimed a majority of the congregation. The result was that in December, Brown and his congregation of reformers, having a right to the church at nine A. M., refused to vacate it at eleven when it should rightfully have been turned over to the loyalists, or "Old Side" party, as they were called. They were accordingly excluded from worshipping in the building and repaired at once to the old abandoned Front Street Church and held their regular services in it. This arrangement was carried on a short time, during which the "Old Side" congregation claimed they had exerted every reasonable effort to compromise, or to regain a partial use of the church. They then resorted to the law by bringing an action in ejectment in the name of the Methodist Episcopal Church against the congregation, which they claimed had an illegal possession of their meeting house. The matter was finally brought to trial and the decision of the court was in favor of the plaintiffs, that is, against the reformers who were in possession. The

defendants moved for a new trial and upon a refusal took an appeal to the supreme court. This court denied the right of the Methodist Episcopal Church to recover and held that the property rightfully belonged to the trustees of the church in trust for all of the members of the society in Pittsburg. As there were trustees in both factions, this did not in reality settle anything but left both sides in the same standing they had been before the suit was brought. The court gave them a rehearing but advised them to settle their difficulties without legal process. The regular minister at that time was Robert Hopkins, and the judge who presided at the trial and gave the wholesome advice was none other than the renowned and erudite Charles Shaler, than whom perhaps no purer nor abler man has since sat on the Allegheny county bench. Both factions, it seems, were willing to take his advice. Accordingly committees were appointed to represent each branch of the congregation and a division of the property was made. By this arrangement the Smithfield Church was awarded to the Methodist Episcopal Church, that is, to the "Old Side," or loyalists, but they were to pay the others two thousand dollars, and also to cede to them the cemetery, which occupied the ground where the Union station of the railroads now stands. The division of the property was very nearly an equal one as to both property and membership, with perhaps the greater wealth going with the new congregation. The new church was called the Methodist Protestant Church. It is yet in existence and will be considered elsewhere in these pages.

While all this four years' war was going on in the Methodist Church a new congregation of Methodists was forming. They purchased a lot from Anthony Dravo in March, 1831, on the corner of Liberty and Fourth streets, and went to work at once to construct a church on it. Rev. Wesley Browning was one of the preachers on the circuit at that time and was the architect of the church and also superintended its construction. Its membership was made up partly from recruits in the city and partly from those who were dissatified with both of the churches that were contending over the property of the Smithfield Church. In 1833, when the Smithfield Church was returned to the regular congregation, the Liberty Street Church was completed and many of the old church members united with the Liberty Street Church, for they had been driven about and subjected to much loss, so that many of them had lost interest in the old organization. The Smithfield Church had been chartered in 1828 and the corporation was not changed. The Liberty and Smithfield Street churches were therefore both continued in the work and worked in harmony as one corporate body until 1837, when an amicable division of property was made and the Liberty Street Church procured a charter. After that they constituted two separate organizations.

A Methodist class was organized in Allegheny Town as early as 1829 or 1830, and soon after another nearby came into existence. The men mostly instrumental in forming these were George Adams and William College. They were supplied with ocasional preaching from ministers in Pittsburg,

but they very soon secured a frame building on Park Way, and in 1831 purchased a lot sixty feet square from Hugh Davis, the lot being situated on North Diamond street. They erected there a small frame building and it was the first Methodist church in Allegheny City. It was enlarged afterward and this accommodated them until 1838, when another was built. Their first regular preacher was Alfred Brownson, who was sent there in 1832. In 1831 a Sunday-school was organized in Saulsbury Hall. A class of Methodists followed it shortly and in 1833 a regular preaching place was established by the Methodist preachers from Pittsburg. A church was finally built by them on the lot purchased from a man named Duncan, situated on Bingham street. It soon became too small and by some means was exchanged for a Presbyterian church on Centre street, which was but partly finished. This they completed and occupied until 1857, when a lot was purchased on the corner of Bingham and Thirteenth streets. These four churches, Smithfield Street, Liberty Street, Allegheny and Bingham, represented the advancement of Methodism in Pittsburg and vicinity in 1835. This seems but slow progress for forty years, yet it must be remembered that Pittsburg was then but a small place, the population of both cities being perhaps about twenty-two thousand. The preachers who were sent to the various churches in Pittsburg during this period of thirty-five years were as follows: 1788-89, Charles Conway and Pemberton Smith; 1790, George Callahan and Joseph Doddridge; 1791, Charles Conway; 1792, Valentine Cook and Seely Bunn; 1793, Daniel Hitt and Alward White; 1794-95, John Watson and Richard Ferguson; 1796, William Beauchamp; 1797-98, Robert Manly; 1799, James Smith; 1800, Nathaniel B. Miles and James Quinn; 1801, Lasley Mathews and Isaac Robbins; 1802, Benjamin Essex and Noah Fidler; 1803, William Page and Lewis Sutton; 1804, William Page and William Knox; 1805, Jesse Stoneman and Thomas Church; 1806, Thomas Daughaday; 1807, R. R. Roberts and J. W. Harris; 1808, Frederick Stier and Thomas Daughaday; 1809, William Knox and Abram Daniels; 1810, William Knox and Joseph Langston; 1811, J. M. Hanson; 1812, Jacob Dowel; 1813, John Swartzwelder; 1814, L. R. Fechtig; 1815, Jacob Dowel; 1816, Thornton Fleming and John McElfresh; 1817, Andrew Hemphill; 1818, L. R. Fechtig; 1819-20, Samuel Davis; 1821, John Baer and T. J. Dorsey; 1822, Richard Tydings and Henry B. Bascom; 1823, Richard Tydings; 1824, Asa Shinn; 1825, William Stevens; 1826, Charles Cooke; 1827, John Waterman and Robert Hopkins; 1828, William Lambden and Jacob Blake; 1829, Robert Hopkins; 1830, Z. H. Coston and Wesley Browning; 1831, Charles Elliott and Wesley Browning; 1832, Martin Ruter and Thomas Drummond; 1833, Martin Ruter, P. M. McGowan and Hiram Gilmore; 1834, T. M. Hudson, Mathew Simpson and William Hunter.

From the founding of the church up to 1835 all organizations in the cities were under the same pastoral charge or circuit. The conference in later years assigned three preachers to the circuit and each church was served by one of them. But in the conference in 1835 the old system was abandoned and each

church was designated as a station and was given a pastor whose duty it was to devote his time exclusively to it. To Smithfield Church was sent Rev. Charles Cooke, to Liberty Street was sent Mathew Simpson, who afterward became the noted bishop and orator, to Birmingham was sent G. D. Kinnear, and to Allegheny City, C. Jones. The new system worked an improvement in all of the churches.

During the first year under the new arrangement a society was organized at Bairdstown and it was called Wesley Chapel. Later it was connected with Smithfield Church, so that the preachers of that appointment could minister to its wants. They were Revs. Charles Cooke and Wesley Smith. The congregation grew and soon built a brick church on a lot which they purchased on Liberty and Seventeenth streets. Many years later they disposed of this property and bought a lot on Penn avenue, near Eighteenth street, on which they built a church. In 1838 an organization was effected in Allegheny called the South Common, taking its name from the street on which it was erected, though the street is now called Church avenue. Rev. Simon Elliott was the first pastor. In 1884 the edifice was thought to be unsafe and was condemned, so they held their services for several years in a hall on Federal street. In 1886 Rev. J. J. McIlyar was pastor and with his advice the congregation purchased a lot on Buena Vista street, building on it a good sized brick church. It was ready for occupancy in September, 1888. When the South Common Church was organized the old church took the name of Beaver Street and retained it until the name of the street was changed to Arch street in 1871, after which Arch Street became the name of the church. In 1838, when Rev. Robert Hopkins was pastor, the frame building was removed and a brick one built in its place. This was replaced in 1888 under the pastorate of Rev. Dr. W. T. Connor, by the present stone structure. East Liberty congregation was organized in 1839, though some years before that services with considerable regularity were held there. It had increased enough to become a station with a pastor of its own in 1863. In 1870 its name was changed to Emery Church.

In 1840 an organization of Primitive Methodists was made in Temperanceville. In 1845 they became part of the Methodist Episcopal Church, becoming an appointment on the Chartiers circuit. It increased sufficiently to become a station in 1848, with S. B. Dunlap as its pastor. They built a church in 1850, which lasted them until 1888. In that year Dr. H. C. Beacom was pastor and the old church was replaced with a splendid stone edifice, completed in 1890. The church now called Fifth Avenue was organized as Asbury Chapel in 1842. Its first church was on Townsend street. In 1860 the congregation took the name of Pennsylvania Avenue, and in 1874 took the name they now have. Manchester became an appointment in 1846, using a small brick church for some years. In 1867 they built a new church and took the name of Union Church. The present Carson Street Church was formed prior to 1848, for that year, under the name of South Pittsburg, it had a minister appointed to serve it. In 1871 the railroad took its edifice, whereupon

it removed to Carson street. The Ninth Ward Mission became an appointment in 1853. In 1855 the name of the church was changed to Trinity and a house of worship was built on Twenty-fifth street. Its first pastor was the renowned Alfred Cookman, who was sent there in 1855. It was one of the first churches among the Methodists wherein a fine style of modern architecture was employed. Lawrenceville received its first pastor in 1885. This congregation worshipped in a small frame building on Fortieth street, which was later occupied by the German Methodists. The present lot was purchased in 1866, when Rev. J. W. Baker was pastor. The year following, under Rev. J. A. Miller, the church was built. It was finally dedicated in 1869. Ames Church was organized in 1862 by members who withdrew from the Liberty Street Church because they were opposed to instrumental music in the church. In 1863 they were able to receive a pastor, and in 1876 removed to Hazlewood. Centenary was organized in 1866, a century after the birth of Methodism, by the Ladies' City Mission. Simpson Church was organized in 1858 and for eleven years was known as Duquesne Borough Church. Walton Church grew out of a Sunday School organized in 1864. A class was formed in it and this grew until 1870, when the organization was strong enough to ask for a preacher. The church was then called East Birmingham, but the following year a church building was begun and the name changed to Walton. The church was not completed but was nevertheless heavily in debt. In 1881 Joseph Walton, who had already contributed largely to it, finished it by adding another story and also paid off the debt in full. Woods Run Church came into the list of churches in 1870. Oakland, St. Paul's, and Homewood came in 1872, and Brown Chapel, at first called Squirrel Hill, was organized in 1876. Mount Washington congregation bought a lot and built a church on it in 1866, dedicating it on June 10. It was supplied by James Dermitt, a local preacher, until 1868, when it became a regular appointment. South Street Church was first known as Allentown, and was organized in 1873. It was supplied by Jacob Shoffer, a local preacher, until 1876, when it had grown sufficiently to support a minister, who was regularly assigned by the conference. McCandless Street Church purchased lots in December, 1882, and during the following summer erected a building on them. Haven Church was built in 1880 and received a regular pastor in 1884.

In 1880 a church union was formed comprising all the Methodist churches in the city of Pittsburg and vicinity. The object of this union was to assist the poorer churches that were in debt, though to this end a general fund was started and increased as rapidly as possible, with the understanding that it should be applied to the churches which needed it most. Walton, Carson Street, Oakland, Centenary and Fifth Avenue churches were all heavily in debt at that time and, moreover, they had poor prospects of being able to free themselves from these responsibilities. As a result of the church union in less than three years these churches were all free or greatly relieved from the debt in that way. In 1838 there seems to have been a good many Germans of the

Methodist persuasion and this induced the church authorities of Pittsburg to ask Dr. William Nast to come here to preach to them. He came and worked daily in preaching and distributing Methodist literature printed in the German language. His visit and work resulted in large additions to the church. Two classes with about thirty-five members, were formed in Allegheny and among them was Englehart Reimenschneider, a young man who afterwards became prominent in the ministry in this country and in Germany. In less than a year thirty-five members had increased to over one hundred. The services were held in a building standing where the Union station now stands. The congregation met with much opposition, for German Methodists were not common in those days. The preacher and the congregation were both enthusiastic and were only content when they were spreading their work even into adjoining counties. After a time Dr. Goering was sent as pastor. He rented a chapel on Smithfield street and when they were ready for a church the English congregations helped them to build it. A lot was purchased on Strawberry alley and a two-story building was erected on it. The location was very unfortunate, for the Germans did not like the idea of worshipping on an alley. For many years it injured the progress of the church. In 1840 the work among the Germans was carried into Allegheny and it grew more rapidly there than it had even in Pittsburg. The first pastor, Rev. J. Smith, was sent to them the same year. Up until 1857 they worshipped in a little frame church on Chestnut street, at which time it purchased the more valuable property on Ohio street on the corner of Union avenue. It rapidly became a great power in the German element of the city, but suffered perhaps more than any other congregation with the financial difficulties between 1873 and 1877. In 1840 a congregation was founded on the South Side. It built a small church, which lasted for ten years, for its growth was gradual. In 1850 it purchased a small brick church from the English Lutherans, situated on Bingham street. In 1882 they had outgrown it and erected a larger edifice on Sixteenth street. A society was organized in Lawrenceville in 1868 by Methodists who were mostly members of other churches. They bought a church formerly owned by the Butler Street English congregation. Their congregation increased rapidly.

The first church, which had been built on Strawberry alley, removed to Ross street in 1870, using a building that had been occupied by the English Methodists. The new church was a good one, but was in the centre of a foreign population that was no better than the location on the alley that they had left. In a few years they united with South Side organizations and sold their Ross and Bingham street properties. A mission was organized in East Liberty in 1885, with services in Hall & Nelson's hall. The organization was effected by Rev. C. Golder, of the Lawrenceville Church. Late in the fall they received a pastor, Rev. P. Magley. Rev. A. L. Petty, D. D., was then pastor of the English congregation and gave the mission great assistance, as did also his people. They very soon built a neat frame church on the corner of Park

avenue and Carver street. Thus it will be seen that the German Methodists have several churches in the city, valued at perhaps a hundred thousand dollars, and free from debt. They are a thrifty people and earnestly support the church of their selection, be it Lutheran, Catholic, Methodist or otherwise.

Until 1881 the colored population had no congregation of Methodists in either city, though there were African Methodist Episcopal churches and an African Methodist Episcopal Zions Church. In 1881 Bishop Wylie sent Rev. Benjamin Meyers, of the Washington conference, to Pittsburg for a short time as a missionary and he organized the first Methodist Episcopal church among the colored population. They met in the building on Spring alley. In 1882 Rev. W. W. Jenkins became their pastor, remaining three years. Under him they removed from Spring alley to Eureka hall, on Arthur street. In 1885 and 1886 Rev. Henry Sellers was pastor and was succeeded by Rev. J. H. Watson. They worshipped for a time in Franklin school house. In the meantime they were building a church, into which they moved on November 21, 1888. It is on the corner of Clark and Fulton streets. In 1887 they began holding services in the lower part of Allegheny City and very soon organized a congregation there. As usual they used the school house for worship until they were able to build a church, which was dedicated on January 13, 1889. It is situated on Market street.

METHODIST EPISCOPAL STATISTICS.

The following gives the membership (in full connection) of the Methodist Episcopal churches in Greater Pittsburg, as shown by the Conference Minutes for 1906:

Asbury, 45; Bingham Street, 306; Brushton, 397; Butler Street, 710; Centenary, 386; Christ Church, 880; Denny, 225; Duquesne Heights, 214; Emery, 851; Friendship Park, 389; Herron Hill, 100; Homewood Avenue, 674; Italian Mission, 45; Liberty Street; Lemington Avenue, 62; Lincoln Avenue, 592; Mary S. Brown Memorial, 157; McCandless Avenue, 204; Morningside, 79; Mt. Washington, 512; Oakland, 406; Pacific Avenue, 200; Polish Mission, 55; Smithfield Street, 628; Spencer, 74; Trinity, 147; Walton, 307; Washington Avenue, 373; West End, 625; Sheraden, 284; Verona, 280; Wilkinsburg (Mifflin avenue), 243; Ross Avenue, 223; South Avenue, 830; West Pittsburg, 112.

(Allegheny) Arch Street, 710; Buena Vista Street, 347; California Avenue, 378; Calvary, 330; North Avenue, 1,007; North End, 130; Perryville Avenue, 500; Pleasant Valley, 100; Simpson, 100; Union, 381; Ambridge, 63; Aspinwall, 257; Baden, 114; Beaver, 478; Millvale, 378. Total in Greater Pittsburg, 16,914. Number of churches, forty-nine.

THE PITTSBURG CHRISTIAN ADVOCATE.

The Pittsburg Christian Advocate is the church journal or religious paper of the Methodist Episcopal Church in Western Pennsylvania, Eastern Ohio

and West Virginia. It originated indirectly by a resolution which was introduced into the Pittsburg Conference by Rev. George Brown and Rev. Alfred Brunson in 1826. The resolution called for the establishing of a religious newspaper in Pittsburg. No action was taken on the resolution at that time. Prior to that the *Christian Advocate and Journal* had been founded in New York, and the conference had been supporting it, and in 1827 passed a resolution to that effect. The idea of starting a home paper had been agitated from time to time until 1833, when on September 15, the first paper of the *Pittsburg Conference Journal* was issued under the editorship of Rev. Charles Elliott. After one issue, however, the paper was suspended until February 1, 1834, when its regular publication was begun. It continued to be called the *Pittsburg Conference Journal* up to October, 1840, when its name was changed to the *Pittsburg Christian Advocate,* the name which it has since continually borne. Dr. Elliott was its editor from its foundation until June, 1836, when the general conference of that year elected him as editor of the *Western Christian Advocate,* which was then published in Cincinnati. For two months after his retirement Dr. Charles Cooke acted as editor, when Dr. William Hunter was elected editor by the Pittsburg Conference. He assumed his editorial duties in August, 1836, and served until August, 1840, at which time Dr. Cooke was again elected editor and served four years. From 1844 to 1852 Dr. Hunter was again editor; from 1852 to 1856 Dr. H. J. Clark was its editor; from 1856 to 1860 Dr. J. N. Baird was editor; from 1860 to 1872 Dr. S. H. Nesbitt; from 1872 to 1876 Dr. William Hunter was again editor, making in all twelve years in which he served in this capacity. From 1876 to 1884 Dr. Albert Wheeler was its editor; from 1884 until the present time Dr. C. W. Smith has been its editor, his service covering a longer period than that of any other. His term will expire in June, 1908, with the meeting of the General Conference, but he doubtless will be elected on account of his efficiency in the work generally. The paper was founded as a religious organ of the Pittsburg Conference, which then covered the territory over which it now circulates. From the Pittsburg Conference, the Erie Conference, West Virginia Conference and East Ohio Conference have been from time to time carved, and the paper has continued to supply them and to be their official religious organ. It has been a very successful journal and has contributed greatly to the success of the Methodist Episcopal Church.

The Methodist Book Department, as it is now called, is a very important adjunct to the church in Pittsburg. The object of the department is to supply members of the church and others with literature, paying more attention to Methodist literature but not by any means to the exclusion of other publications. Rev. Jacob Flake began to keep a stock of Methodist publications for sale as early as 1831 in Pittsburg. His store was purely a private affair, but out of it grew the depository of this day which is owned by the church. It was not probably very successful under Flake, for he closed his store for two or three years and removed elsewhere. In 1835 Rev. Matthew Simpson, after-

ward Bishop Simpson, was an almost unknown minister in Pittsburg, and procured a small stock of books and kept them for sale. At that time Dr. Elliott was editor of the *Advocate*, and he and Simpson joined in the book business, keeping the books at the office of the editor. When Dr. Hunter became editor of the *Advocate* in 1836 he took charge of the stock of books kept for sale by Simpson and Elliott. In 1840 the church took charge of the store and established a regular department, which was placed in charge of Rev. Z. H. Coston. He was succeeded in a short time by Rev. Robert Hopkins, who in turn gave way to Rev. J. H. Reed, who served in that capacity for many years. These changes were due to the fact that the agents were elected each year by the Pittsburg Conference. Reed retired in 1868, when Dr. Joseph Horner was appointed agent by the New York depository, for the Pittsburg depository had by that time passed into its hands. Dr. Horner is yet filling the position. In 1868 a new building was erected on Smithfield street, at the corner of Virgin alley, and in it the depository is kept and the *Pittsburg Christian Advocate* is published. Both are the property of the church, which also owns the building. It is said that the Pittsburg depository is one of the most successful in the church from a business point of view. It draws its trade from the book-buying people of Pittsburg and from all over Western Pennsylvania, Eastern Ohio and West Virginia.

THE EVANGELICAL LUTHERAN CHURCH.

The Evangelical Lutheran, commonly called the Lutheran Church, began its work very early in Western Pennsylvania and is now represented by many strong organizations. They hold to the doctrines of theology as expounded by Martin Luther and as contained in the "Augsburg Confession." This Confession was read in the presence of Charles V, Emperor of Germany, at the Diet of Augsburg on June 25, 1530. It has long since obtained a prominent place in the literature of the Christian world and has been translated into every modern language. It is now the guiding star in the religion of millions of people in the United States. The first Lutherans in Western Pennsylvania were nearly all Germans or people of German extraction, who kept their church records almost exclusively in that language. More than a half century afterward these records fell generally into the hands of an English speaking people who were not able to read, and in many instances did not preserve them. For this reason the earliest work of the church is founded largely on tradition. They met at first in private houses when they were without a minister, his place being taken by a school teacher or by some one who could read, for many of the older settlers could not. They read the Bible, had prayers and singing, and sometimes a sermon was read. Among them the ceremony of baptism was performed by the school master or by laymen in the absence of a regularly ordained minister. The old records of many churches show this. The first Lutheran Church established in Western Pennsylvania of which we have any

knowledge was Zions Church, near Greensburg. The records show that Balthazer Meyer, a teacher, began to baptize children as early as 1772 at that place. It was, however, ten years before the first regular preacher was called there. His name was A. N. Lutje. He had been born and educated in Germany. His work at that church carried him also into all settlements in this section and he often visited Pittsburg between 1772 and 1782. In 1783 Dr. Schoep, a German physician and naturalist, came to Pittsburg over the Forbes road in a carriage. Returning to Germany, he published an account of his trip, which was printed in 1788. In that he states that in Pittsburg he saw a small church which was used alternately by the Lutherans and Reformed Church. He also referred to a German preacher in Pittsburg who ministered to believing persons of different confessions. So the Lutheran had a foothold in Pittsburg very early in its history. In 1787 the heirs of William Penn, who were anxious to build up the town, deeded to the Reformed and to the Lutheran churches a lot on the corner of Sixth avenue and Smithfield street. This deed conveys as follows: "To the two German religious communions or congregations in the aforesaid town of Pittsburg and its vicinity, one of the said communions or congregations being known and distinguished by the name already designated, of the Protestant Evangelical Church, which adheres to the Augsburg Confession, and the other of the said communions or congregations known and distinguished by the name already designated, of the Protesttant Reformed Church." For many years in all parts of Western Pennsylvania the Lutheran and Reformed churches worshipped in the same building and were served by the same pastor. Still later each had separate pastors, but built, owned and occupied jointly the same edifice. This Scotch-Irish settlement of Pittsburg was not, however, a prolific field in which to plant Lutheranism. In the early 30's Revs. Rosemiller, Yeager, Lape and others visited the Lutheran families in Pittsburg and held services here, but they were not kept up regularly. In the winter of 1836-37 Rev. F. Heyer was sent to Pittsburg by the strong Lutheran churches in the eastern part of the state to labor as a missionary among the German and English Lutherans. He spoke both English and German perhaps equally well and very soon an invitation was given him to organize an English congregation. He complied with their request and at once began to hold public services in the English language regularly. On January 15, 1837, a congregation was organized. The entry in the records kept by the church is as follows: "Pittsburg, January 15, 1837. Inasmuch as the circumstances seem to require the immediate formation of an English Evangelical Lutheran congregation in the city of Pittsburg under the care of the Evangelical Lutheran Synod in Western Pennsylvania, the following named persons made application to have their names recorded and to be considered as members of the church to be organized." George Weyman was the first whose name is recorded as a member and there were twenty-one others. The officers elected were: Elders, George Weyman and A. F. Heisely; deacons, Jeremiah Ritz and W. J. Anshutz. They were properly installed on the even-

ing of the organization day by the pastor after he had preached to his congregation. On March 26 of the same year, it being Easter Sunday, the first communion services of this church were held. Rev. Heyer, during his pastorate, also ministered to the German Lutheran congregation of Pittsburg and of Allegheny. This necessitated services in both languages. The organization had no church at that time. They were permitted to use a small Unitarian church on Smithfield street, and after that used the Second Associate Reformed Church. They soon abandoned the use of both these churches and held their services in a school house which stood where the Monongahela Hotel now stands, on the corner of Smithfield and Water streets. From some cause they were banished from this house also, after which they held services in private houses. In the meantime the Unitarian Church was without a regular pastor and the building was sold to Benjamin Bakewell. He opened its doors to them until June, 1838, when the Unitarians secured a pastor and again opened their church. The Lutherans were thus again without a house. The pastor secured by the Unitarians left them a short time afterward and the Lutheran Church occupied the building. After they were put out again they used the court house, which has been described as a foreboding and gloomy structure in the extreme, and was accepted by them only because they could secure no other building. The minutes show that they held services in it every two weeks and that on June 24, 1838, a committee consisting of George Weyman, Jeremiah Ritz and A. F. Heisely was appointed to "look around for a building lot." A lot was finally purchased on the corner of Seventh avenue and Strawberry alley, later known as Montour Way, for eight thousand and four hundred dollars. On October 2, 1838, under the pastorate of Rev. Heyer, the following action was taken: Resolved, that in reliance upon definite aid, we forthwith commence operation in view of the erection of an English Evangelical Lutheran Church." Rev. Heyer was followed by Rev. Emanuel Frey, whose health failed and he was compelled to resign. He had followed Rev. Heyer in November, 1838, and left before the close of that year. The church was then without a pastor until May, 1839, when Rev. John McCron was secured and installed. The congregation resolved again to go forward at once with the erection of a building. Funds seemed to have been the only material lacking, and the new pastor made several trips to the more wealthy eastern congregations to secure aid. The new church was begun in the spring of 1840 and completed ready for occupancy in October. It was for its day and considering the financial standing of its members, a very respectable edifice, and cost about fourteen thousand dollars. It was consecrated on the first Sunday of October, and at the same time the Western Pennsylvania Synod was held in it. The sermon on consecration day was preached by Dr. S. S. Schmucker, who was assisted in the general ceremony by Dr. C. P. Krauth, Sr., and by the pastor. This service and the convention of the Synod gave a new life and standing to the congregation. Two years later, after a very successful ministry, Rev. McCron resigned. The purchasing of the lot and the

building of the church involved the congregation in debt, under which they labored several years, when it was finally paid, though it had been in the meantime very oppressive to them. It is said that it was largely through George Weyman that this debt was paid. The pastor following McCron was Rev. William H. Smith, of Charleston, South Carolina, but he remained only about a year, when he resigned because of bad health. On April 22, 1844, Rev. W. A. Passavant, of Baltimore, was selected and came to Pittsburg as pastor on June 1. He remained with them until May 1, 1855. His successor was Rev. Charles P. Krauth, Jr., of Winchester, Virginia, who came to Pittsburg in September, 1855. Like Rev. Passavant he was a very strong man. He added greatly to the church and remained until September, 1859, when he moved to Philadelphia. The people of his church and vicinity loved him very dearly and never ceased to honor him, even to the day of his death, for then they draped the chapel in mourning and bowed their heads in sorrow. On May 16, 1859, Rev. Reuben Hill came in response to a call and remained with them until July, 1866. He was followed by Rev. Samuel Laird, who was elected July 30, 1867, and remained till August 1, 1879. He also proved a strong man and while with them the church increased gradually. On November 19, 1879, Rev. Edward Balfour, of Chicago, was elected pastor. In the meantime the desire to build a better and larger church had grown on the congregation and finally it became a necessity. At a meeting held on August 12, 1855, a council was instructed to purchase a lot on Grant street and Strawberry alley, having a frontage of one hundred and twenty feet on Grant street. This was purchased for fifty-five thousand and nine hundred dollars. In December the congregation sold a property it had owned for some time on Penn avenue and Ninth street, for seventy-five thousand dollars. On the Grant street lot the congregation built a splendid church of gray stone, after the Gothic style of architecture and with the interior of the building finished in keeping with the structure generally. This church was consecrated on November 4, 1888, Rev. Dr. Samuel Laird, John A. Kunkleman and Rev. Reuben Hill assisting in the consecration. The cost of the church was ninety thousand dollars. It has since grown to be a wealthy congregation and is equally liberal in its benefactions in the aid of hospitals, schools, missions, etc.

The reader will recall that Rev. Heyer labored among the German Lutherans in his day as well as among the English. This congregation was organized on January 22, 1837, and for years held their services in the same place that the English congregation held theirs. The elders were Michael Thomas and Mathias Kinzer, while their deacons were Jacob Kountz, George Groosman, Mathias Reuschlen and George Stegmeyer. They, too, were poor at first, but in 1839 proposed to build a church. They purchased a lot on the corner of Sixth avenue and Grant street for four thousand, five hundred dollars and on this they built a church, which was consecrated on April 5, 1840. For some time they kept up a parochial school in the basement of the church. Rev. Heyer was succeeded by Rev. Frederick Schmidt, who had the church in-

corporated in January, 1841. Rev. Gottfried Jansen followed him as pastor and served until his death on February 19, 1847. His remains were buried in the cemetery of the church, and the congregation erected a monument at his grave. He was followed by Rev. Jacob Vogelback, who remained three years. The church grew with each succeeding year, and late in the 40's was too small to accommodate its membership. On January 14, 1848, a lot was purchased on Wylie avenue and High street for six thousand dollars. The new church was consecrated that year and the old one was sold to a Baptist congregation for five thousand, five hundred dollars. Rev. Vogelback remained till 1850 and was succeeded by Rev. J. G. Zenner on November 18. The new pastor was very much opposed to secret societies and induced the authorities to prohibit their members from belonging to them. This rule was rigidly enforced for many years. Rev. Zenner resigned on June 10, 1856. In 1857 Rev. E. A. Brauer, from Illinois, assumed pastoral charge of the congregation. The unfortunate provision of the charter as amended under Brauer's ministry was that the services of the church should never be conducted in any other than the German language. In 1863 Rev. Brauer left for St. Louis, where he became a teacher of theology and was succeeded in Pittsburg by Rev. J. A. F. W. Mueller. While he was pastor the Panhandle railroad projected a tunnel which passed under the church and practically ruined it, so that they were compelled to seek another location for their church, school and parsonage. A suit was brought and after a long and exhaustive litigation the company was forced to pay for the damages they had done. During part of this time the congregation worshipped in Lafayette Hall, on Wood street, which, being damaged by fire, they secured the Third Ward school house, on Grant street. A large lot was purchased on High street, near Fifth avenue, for twenty-five thousand dollars, on which a good sized church of Gothic architecture was erected, together with a three-story school house and a parsonage. The new structure was consecrated on August 9, 1868. It is now called Trinity Church. In 1871 Rev. Mueller was succeeded by Rev. J. P. Beyer, who was followed by Rev. T. A. Ahner in 1880.

Rev. Heyer may also be called the founder of the St. James German Evangelical Lutheran Church in Allegheny City. The German Lutherans of Allegheny attended services held by him in Pittsburg. Both sides of the Allegheny river wanted a new church building and when they were ready to erect it each side claimed the larger following. When at length the Pittsburg congregation concluded to build, those in Allegheny also determined to build a church. The date of the organization in Allegheny is not exactly known, but it was likely late in 1837. To Rev. Heyer is therefore due the honor of really forming three churches in one year, and since his day all of them have rebuilt and have done needy work in the church development of Pittsburg and vicinity. The Allegheny organization, through its trustees, bought two lots on Main street and Reusch alley on January 30, 1838, for eleven hundred dollars and on them they built a frame church 45x25 feet, at a cost of four hundred and fifty

dollars. Even this small sum of fifteen hundred and fifty dollars was not paid for some years, for they were very poor, most of them being laborers who received only thirty-seven and one-half cents per day, and during the financial distress of 1837-38-39 work was scarce even at that small sum. The consecration of this little church was doubtless very important to its communicants. It took place on January 1, 1839, and was dedicated by Revs. Heyer and Schweizerbarth. It was the second Lutheran church built in Allegheny county. Rev. Heyer had more than he could do with all this membership in the cities and often secured Rev. Jonas Mechling and Rev. M. J. Steck, of Greensburg, to preach to them in his place. In 1839 Rev. R. P. H. Mueller was chosen as their pastor, but he only remained with them until 1841, when Rev. W. Bauermeister took his place. He also remained but a year and was succeeded by Rev. Karl Kobler, who was soon dismissed because of irregularities in his conduct. In 1843 Rev. Herman Eggers became pastor and he was followed in 1844 by Rev. Jacob Hoelsche. In 1846 they resolved to build a new church, as their numbers had outgrown the old one. The little frame structure was sold to a Methodist congregation and moved by them to another lot. The corner-stone of the new one was laid in April, 1847. Rev. Mechling and Dr. Passavant assisted in the ceremonies. The building was finally consecrated in September, 1847. Rev. Hoelsche also proved an unfortunate selection and was dismissed late in 1848. He was succeeded by Rev. G. C. Friederich, of Lancaster, who proved to be a very eloquent and able pastor. But during his service unhappy contentions arose and he was compelled to leave. He was followed by Rev. C. E. A. Brandt, who served them but a few years, when he, too, withdrew under a cloud. These unfortunate selections and changes counteracted the general usefulness of the church in a great measure. They then selected Rev. F. Scheidt, who was elected July 6, 1857. He proved to be a splendid man in every way, for under his ministry the church made many improvements. At first they excluded all members of secret societies, but afterward the rule was rescinded. He remained with them for twenty-five years. Long before his term ended they began to talk about and actually to need a new church. A lot was purchased on Liberty street and Madison avenue, 82x157 feet, for six thousand, eight hundred dollars. On this lot they built a large church at a cost of fifty thousand dollars and in a few years a parochial school, which cost thirteen thousand dollars, and a parsonage costing nine thousand dollars were erected. In 1884 Rev. A. Ebert was called as assistant pastor, shortly after which Rev. Scheidt resigned. The assistant pastor died shortly after. Rev. H. J. Shuk became pastor of the church in 1885. The secret society question was brought up again and all members were forbidden from belonging to them, and the order was strictly enforced. Because of this a number of prominent members withdrew and formed another church organization. Four congregations have been formed out of the original one as formed by Rev. Heyer in 1837. These all came from it in addition to the one formed by those who withdrew because of the secret society

resolution, yet the old congregation is stronger still than any of them. The progress of the church has been gradual all these years. The St. Peter's Evangelical Lutheran Church in East Liberty, was organized in 1839 as a united church by Rev. Weiters Hasen. It did not prosper and was afterward reorganized as a Lutheran church. It has been served by the following ministers: J. Hoelsche, W. Berkemeier, H. L. Heohn, B. K. Kuhn, R. Neumann, J. Kucher, C. Bauman, C. A. Fritze, F. H. Reichman and H. Schmidt. When it was organized the congregation was very small, but it has almost steadily increased since the beginning. The parochial school has been kept up constantly by it. In 1852 a church was erected on Frankstown avenue, and in 1864 a better one was erected, this last one being on Collins avenue and Station street. St. Paul's German Evangelical Lutheran Church, in South Side, was organized in 1850 with but fourteen members. It is now one of the largest churches in the city. Its pastors have been Rev. G. A. Neuffer, C. Popp, J. H. C. Schirenbech, H. Gilbert, A. Helzberger and P. Brand.

The first edifice was built in 1850 and another in 1866, while in 1868 a parsonage was built and in 1887 a school house. The Second German Evangelical Lutheran St. Paul's Church was founded in 1852 by Rev. Berkemeier with but a small membership. He was followed by Revs. R. Neumann, G. A. Wenzel, D. D., F. Lindeman, N. Soergel, etc. Their first church stood at the corner of Sixth avenue and Grant street. In 1871 they built a larger one on Pride street, this one being built mainly through the efforts of Dr. Wenzel. The Grace English Evangelical Lutheran Church in South Side was organized in 1852 by Rev. H. Reck with but sixteen members. They worshipped at first in a hall and built a church in 1853 on South Seventh street. They also own a parsonage. The pastors have been H. Reck, C. D. Ulery, W. H. Roth, D. D., J. H. Melhorn. St. John's German Evangelical Lutheran Church was organized in 1857 by Rev. Graff. For more than a decade of years it changed pastors very often. Rev. F. Schaeffer was elected pastor in 1870 and was followed by Rev. H. E. Seipel, A. Bauer and M. Reidenbach. They built a good church in 1862 on Fourteenth street, below North. The German Evangelical Lutheran Church, on the corner of Thirty-seventh and Bank streets, was organized in 1868 as a mission, but in a few months it became self-supporting. The early pastors were Rev. C. Engelder, F. Reichman and William Hein. The first church was erected in 1868 and another in 1876. The English Evangelical Lutheran Church was established as a mission by J. Q. Waters in 1869. Services were first held in a school house, but a chapel was soon built on the corner of Liberty street and Washington avenue which was used for a place of worship. Its early pastors were J. Q. Waters, L. Geschwind, J. T. Lawson and W. A. Passavant, Jr. Bethany Lutheran Church was organized in 1888 with forty members and worshipped in a public hall on the corner of Highland and Ellsworth avenues. Its first pastor was Rev. G. L. Haunn. The Swedish Lutheran Church was organized about twenty-five years ago and for a time held their services in the basement of the

First Lutheran Church on Seventh avenue. In 1837 it attained greater strength under the pastoral care of Rev. Nelsenius and they built a church on Centre near Forty-third street. Rev. J. M. England was the second pastor.

The Trinity English Lutheran Church grew from a mission Sunday school formed in an engine house on Anderson street in 1855. Out of it a church was founded in 1860 by Rev. W. A. Passavant, D. D., starting with thirty-two members. The first regular pastor was Rev. H. Reck. A number of members from the First Church of Pittsburg entered this church. They worshipped at first in a frame chapel on Washington street which they had bought from the Presbyterians. The first edifice was erected in 1872 on Stockton avenue. Mr. Reck was followed in 1863 by Rev. J. G. Goettman, D. D. On their twenty-fifth anniversary they showed their zeal for their church by paying off all its debts. Mt. Zions Evangelical Lutheran Church was organized in 1877 by Rev. G. H. Gerberding. The church is situated on the Perrysville Road. Rev. W. P. Shaner, S. P. Bossart have since been pastors of this church. St. Mathews Evangelical Lutheran Church was organized in 1873 by Rev. J. P. Beyer. It was started at first as a small mission on Third street. In 1877 they built a church on North avenue. Revs. F. Wambsanuss and E. H. Weschmeyer were since located there. St. Paul's Evangelical Lutheran Church was formed in 1880 by Rev. Pfeiffer and was self-sustaining almost from the first. Mr. F. D. Simon afterwards followed and dedicated a church and ground on the corner of Chartiers and Adams streets. Rev. O. Von Zech and A. R. Kuldell have since been its pastors. St. Paul's Evangelical Lutheran Church on the corner of James and Second streets was founded by Rev. E. Pfeiffer who held services there first in July, 1882, holding them in the Reformed Presbyterian Church. It was first a mission and was organized into a congregation on January 7, 1882, with but sixteen members, by Rev. G. W. Lose. Under his ministry a church was built on the corner of James and Second streets which was consecrated in September, 1887. The Memorial Evangelical Lutheran Church was organized by Rev. W. P. Shanor in 1883 and a church edifice was built the same year. Rev. W. J. Finck was its first pastor after Rev. Shanor. The Emanuel English Evangelical Lutheran Church was organized by Rev. J. Q. Waters in 1886 and a chapel built on Juniata street in 1887. Grace English Evangelical Lutheran Church was organized on November 25, 1880, by Rev. W. J. Finck and built a church soon after. Trinity German Evangelical Lutheran Church was also organized in 1888, largely from members from St. Paul's Church through the influence of Rev. A. R. Kuldell, and a church was at once erected on Woods Run avenue, with Rev. Goessling as pastor. St. Thomas' German Evangelical Lutheran Church was organized in November, 1887, by Rev. Ivan Dietrich. A small church was erected by them in 1888. There is scarcely a town in Allegheny county that does not support one or more Lutheran churches.

The Lutheran churches of Pittsburg and Allegheny are represented by the following organizations; the membership in 1904, according to the history of the denomination in Western Pennsylvania, was as indicated with the names of the various churches: In Pittsburg, the list is—Bethany, 491; Bethlehem, 250; Brushton avenue, 175; First Christ, 280; Second Christ, 229; Church of the Redeemer, 181; First English, 480; First German; First German Trinity, 848; First St. Paul's German, 967; Grace, 200; Gustavus Adolphus (Swedish), 233; Holy Cross, (German), 122; St. Andrew's (German), 278; St. Andrew's, 210; St. John's 185; St. John's (German), 375; St. Paul's 137; St. Peter's (German); Second St. Paul's (German), 419; Third German; Trinity, 225; Zion's German, 200; Zion, 386.

In Allegheny the list is: Bethel, 250; Christ (German), 193; Emmanuel, 87; Grace, 305; Mathews (German), 460; Memorial, 186; Mt. Olivet, 41; Mt. Zion, 160; St. John's (German), 1,100; St. Luke's, 110; St. Mark's, 150; St. Paul's, organized 1883, has a membership in 1907 of 400; St. Paul's (German), 81; St. Thomas' (German), 312; Trinity Evangelical Lutheran, organized in 1846, has now a membership of 586; Holy Trinity, 235; Emmanuel (Slavonian), 1,100; Hebron, 44; Hebron (German), 20; Etna Emmanuel, 203.

CHAPTER XVII.

CHURCHES CONTINUED.

The Protestant Episcopal Church—The Baptist Church.

There is no record of services being held by the Church of England, or its successor and representative in America, the Episcopal Church, in Pittsburg prior to 1792. Yet from 1758 the region around Fort Pitt was occupied almost continually by English soldiers and by men who had but recently come from Great Britain. It is quite likely, therefore, that services were held here by representatives of that church frequently, though they have left no record of them. There were, however, no definite attempts made to found a society under the Established Church of England prior to the Revolutionary war, nor was there any attempt to found an Episcopal Church here until several other churches were well entrenched and the century was about ended. Long before the Revolution a society had been formed in England for the "Propagation of the Gospel," and this had done a great deal of church work in the colonies, but there is no evidence that its influence was felt west of the Allegheny mountains. In the voluminous and important collection of historical documents made by Bishop Perry, many of which relate to this section during the Colonial and Revolutionary periods, there are but two references to Fort Pitt, both of which are incidental and neither of which have any connection whatever with church work. The influence of the work does not seem to have reached west of Carlisle. For fifty years or more after the Revolution the Episcopal Church, as the offspring of the Church of England, labored under great difficulties in the United States. Most of the clergy had been educated in England and when the Revolution came, the very name of the church, if nothing else, prompted them to remain loyal subjects to the crown. This brought about prejudices against them and in addition to the natural hostility felt by almost every one to anything, be it clergy or what not, which savored of England. So great was this prejudice that many of the bishops and the clergy despaired of their work. They have been censured for their timidity in this direction, but it is impossible to realize the difficulties surrounding them. The Episcopal Church was all this time on the defensive, because it was thought to savor or monarchical and aristocratical governments and was, therefore, entirely unsuited to the wants

of the people and a free and independent public. Episcopalianism was stronger in the older settlements in the East, but even there its rulers thought they were doing well if they did not go backwards; seldom, if ever, did they think of penetrating new regions. The statistics of the church show a slow decrease up to 1811, especially among the clergy, and even one of the leading bishops of that day said—that in his opinion the final extinction of the Episcopal Church in America was only a matter of time. Yet there were many settlers west of the mountains and in Pittsburg who had been born and educated in England and were strongly attached to the church. Had ministers been sent here to look after them they might have remained within its folds. Rev. Joseph Doddridge was almost the only clergyman of the church who labored west of the Allegheny mountains. He was born in Bedford in 1769 and spent most of his life as a missionary in West Virginia and Southern Ohio. There is no doubt but that he put forth every effort to have the eastern authorities of the Episopal Church pay more attention to this field, but most of his overtures were in vain. He wrote many times of the great numbers in this western section who adhered to this faith; who were entirely without pastoral care. In one letter he avers there were many signs of them west of the mountains even in the early period of its settlement. "Often have these people said to me in the bitterness of their hearts, 'must we live and die without baptism for our children and without the sacrament for ourselves?'" After years and years of pleading for missionaries and bishops to be sent here to look after these people, but with no success, he wrote in despondency and sorrow: "I lost all hope of ever witnessing any prosperity in our church in this part of America. Everything connected with it fell into a state of languor. The vestrys were entirely neglected and our young people joined other societies. I entertain no hope that my own remains after death will be committed to the dust with the funeral services of my own church." A short time after writing the above letter he wrote again as follows: "Had we imitated the example of other church communities, employed the same means of collecting our people into societies and building churches, we should by this time have four or five bishops in this country, surrounded by a numerous and respectable body of clergy, instead of having our very name connected with a fallen church. Instead of offering a rich and extensive plunder to their sectarian missionaries, we should have occupied the first and highest station among the Christian societies of the West." All this long continued neglect and inaction made it only far more difficult to implant the Protestant Episcopal Church in Western Pennsylvania when the work was finally begun in earnest, than it would have been had Doddridge's plan been followed. The opportunity of the early years of the eighteenth century had been neglected and did not return. Not only were thousands lost forever to the church and their children alienated from it but another influence came into the field. The early settlers in and around Pittsburg varied in their church membership, but later came an aggressive Scotch Irish people who brought

their religion with them. They were extremely bitter towards and intolerant of the Episcopal Church and its ritual form of worship which they regarded as little better than Catholicism, a religion which they abhorred and despised. With these explanations the reader will not be surprised that the closing decade of the eighteenth century came before the Episcopal Church had even a foot hold in Allegheny county. The first Episcopal church west of the Allegheny mountains was not even then built in Pittsburg, but in Chartiers township about six miles from the city, and it was called St. Luke's Church. The records of it read as follows: "The first Episcopal Church west of the mountains was organized and the church built by several persons namely: Gen. John Neville, his son Pressley Neville, Major Isaac Craig and others. A lot of ten perches square was given by William Lee for the church and grave yard. The church building was begun in 1790 and furnished in 1791, but it was not finished for some time afterwards." The name of the first rector is not given, but Francis Reno was taken up by Gen. Neville and educated for the ministry of the Episcopal Church. A short time after this he was ordained by Bishop White, of Pennsylvania, and became the rector of St. Luke's Church at Chartiers. He officiated there until the Whiskey Insurrection drove most of the supporters of the church from the community. After the insurrection had passed Mr. Reno came back and was for a time rector of both the Chartiers and of the Pittsburg Societies, but he did not long remain in this neighborhood. The church at Chartiers was abandoned and soon decayed and was made use of for other purposes. A movement was set on foot to rebuild it in 1851.

Dr. Doddridge states in his letters that a convention of four clergymen was held at St. Thomas' Church in Washington county on September 26, 1803, one of the four being Reno, at which it was resolved that the next conference be held at Gen. Neville's old place on Chartiers creek, the convention to begin on the Saturday before Whit Sunday. In 1851 Doctor, afterwards Bishop Lyman, the rector of Trinity Church, Pittsburg, was mainly instrumental in building a new church on the site of the first St. Luke's Church and regular services were resumed there. From the time of its completion until 1871 the church had several rectors, none of whom remained any length of time. Since then it has been but seldom open for services. New towns, such as Mansfield, Crafton, etc., sprung up near it and with Episcopal churches in each of them the membership has been diminished until scarcely any remains of a once large congregation. The Rev. Francis Reno was the first to officiate in the Episcopal Church in Pittsburg for, as we have said, the records show that he served both at St. Luke's and in Pittsburg after 1794. When the Pittsburg church was built, in which services were held in Pittsburg, is not known. In 1797, however, the old records of Trinity Church show that the members of the Protestant Episcopal Church residing in Pittsburg invited Rev. John Taylor to officiate there. In September, 1805, a regular church was organized, for they obtained a charter "mak-

ing and installing Rev. John Taylor the minister of the congregation of the Protestant Episcopal Church in the borough of Pittsburg, Pressley Neville and Samuel Roberts, the wardens of this church, and Nathaniel Irish, Joseph Barber, Jeremiah Barber, Andrew Richardson, Nathaniel Bedford, Oliver Ormsby, George McGunnigle, George Robinson, Robert McGee, Alexander McLaughlin, William Cecil and Joseph Davis the vestrymen, and their successors duly elected and appointed in their places, a corporation and body politic in law, and in fact, by the name, style and title of the minister, church warden and vestryman of Trinity Church, Pittsburg." This was certainly the first step towards planting the church in Pittsburg which assumed a permanent form. For many years after this the history of this church is limited. It became eventually the mother of churches, not only starting them from within its fold, but it looked after them and assisted them in their support until they gained strength enough to support themselves. The building of the first Trinity Church was begun about the time it was organized and chartered. It occupied a triangular lot at the corner of Sixth, Wood and Liberty streets. It was built in an oval form that it might more nearly conform to the shape of the three cornered lot and for this reason was generally known as the "round church." Rev. Taylor in his latter years became known as "Father" Taylor. He remained with the church as its rector until 1817, when he resigned. Little is known of his life or work. He was undoubtedly a faithful and hard-working clergyman of blameless life who probably did more for the church than this somewhat limited sketch would indicate, for he had to contend with the difficulties outlined above. Some years after his resignation he was killed by lightning in Mercer county. Between 1817 and 1823 three clergymen were chosen as rectors, but each resigned after but a brief term of service. They have left almost no records of their work and no statistics of the church for those years. The last of these three rectors was William Thompson, who resigned in 1823 and for some time no attempt was made to select a successor. We reason from these circumstances, and from the successive resignations, that the parish was not in a very flourishing condition. Pittsburg was too remote and too difficult of access for the Episcopal work, where the other churches had many strongholds, to add very rapidly to its membership. The closest bishop was in Philadelphia and the difficulties of the journey for confirmation services, the only way the church could be recruited, is known to the reader of these pages. These hinderances, added to its location in a hostile community, make it surprising to us indeed that the church survived at all. For many years, perhaps a quarter of a century, efforts were put forth to have the eastern Episcopal churches assist Pittsburg and to have a diocese established west of the Allegheny mountains, which would carry with it the election of a bishop for this section. This was again urged by Dr. Doddridge, who, while greatly discouraged, never abandoned hope. At a meeting of the Episcopal Church in St. Thomas' Church in Washington county in 1810, he was authorized to communicate with

Bishop White, of Pennsylvania, urging him to endeavor to induce the General Conference of the church of the United States to carry out this idea. White seemed to consider the matter favorably, but it was not acted upon, and those who importuned the bishop with Doddridge did not learn of the fate of their application until 1812. The eastern church had perhaps as much as they could do to sustain themselves and, therefore, were compelled to turn a deaf ear to these many urgent requests for assistance. In 1812 it would seem that the Episcopal churches began to gather strength, for they formed the Society for the Advancement of Christianity in Pennsylvania. This was their first exhibition of an organized effort to carry the gospel into new regions. Very soon after this Jackson Kemper visited Pittsburg in the interest of this society. There is evidence that he made a report but it has been lost. Kemper was afterwards a missionary bishop of the Northwestern territory. Rev. John Clay, a deacon from Philadelphia, came to Pittsburg in 1814 and supplied the Trinity pulpit, in place of Mr. Taylor, for three Sundays. He also visited other parts near Pittsburg where there were communicants. Another missionary named Richmond supplied Trinity Church for some time and these were the first clergymen from the East who came here. This was about the extent of the assistance which Trinity Church received from the eastern strongholds. The newly formed Missionary Society worked elsewhere and with good results, but Pittsburg was left to take care of itself.

When Rev. Taylor resigned in 1823 John Henry Hopkins, then a member of the bar and a layman in Trinity Church, was asked to officiate. He was born in Ireland in 1792. He came to America and thence to Pittsburg with a superior education in the classics, in French, in music and in painting. He had been engaged in the iron business unsuccessfully with Gen. O'Hara at Hermitage Furnace in the Ligonier Valley, after which he read law with A. W. Foster and was admitted to the Bar in Pittsburg in 1813. In 1823 he practically abandoned the legal profession, in which he had been unusually successful. He was ordained by Bishop White on May 12, 1824. In 1832 he was elected Bishop of Vermont and is known by this title in church history. He had been brought up in the Episcopal Church, but had become a Presbyterian. Afterwards his great love for music induced him to take charge of the choir of Trinity Church in Pittsburg and with this church he united and became in after life one of its leading lights in America. When he first began to officiate at Trinity Church he did nothing more than read the services for the congregation, but soon passed beyond that and was elected rector before he was ordained. He was a voluminous writer in after years and some of his publications show considerable merit. His work on slavery, in which he sought to prove that African slavery was right because of its divine sanction, has subjected him to considerable censure and ridicule. He was the presiding bishop of the Episcopal Church of the United States from January 13, 1865, until his death, which occurred at Burlington,

Vermont, January 9, 1868. Some of his works are: Christianity Vindicated, The Primitive Church, The Primitive Creed, Essays on Gothic Architecture, The Church of Rome, The History of the Confessional, The End of Controversy Controverted, The American Citizen, A Scriptural, Ecclesiastical and Historical View of Slavery from the Days of the Patriarch Abraham to the Nineteenth Century, The Law of Ritualism, The History of the Church in Verse, Twelve Canzonets—Words and Music. He was moreover a member of the Pan-Anglican Council at Lambeth Palace and received the degree of Doctor of Civil Laws from Oxford University, England. No man could accomplish so much in life who was not gifted with a high order of intellect. In addition to this he had a talent for the administration of church work in general and this was shown in the new life which Trinity Church took on at once when he became its rector. His influence was felt not only in Pittsburg, but all over Western Pennsylvania. A new building project materialized at once under plans which the rector prepared. When the church was completed many of the interior decorations were made by him, for he was a connoisseur in painting and a painter of no mean rank. The church was of gothic style of architecture, and was said to be the first example, not only in Pittsburg, but in this country. When completed the edifice seated about 1,000 people and was ready for occupancy in June, 1825. It gave the church a standing in the city, an air of permanency that it could have acquired in no other way. Prior to this, Bishop White had started on a trip to visit Pittsburg, but came west only as far as Lewistown, where he met with an accident and returned to Philadelphia. On his second attempt he reached here on June 25, the object of his trip being the dedication of the new Trinity Church. At the same time he administered the ordinance of confirmation to nearly one hundred and fifty persons who belonged to the congregation, this being the first time the rite had been celebrated west of the Allegheny mountains. It was moreover the first visit of a bishop to the church of the West. The church grew rapidly, increasing in a year from forty to about two hundred members. Its prominence dates from the time Hopkins assumed the rectorship and awakened the membership to the importance of a new edifice. He was a preacher, a theologian, a musician, a lawyer and an artist, and withal, a man of high literary culture and attainments and these powers gave him a great influence throughout the city. He also made many missionary trips to Meadville, Greensburg and other towns and thus organized churches in no less than seven places, it is said, outside of Pittsburg. To supply clergymen for the West he opened a school of theology in his own house, which he had built on a large lot of ground now in the heart of Allegheny City. His house was a large brick structure and in it he fitted up rooms for chapels for recitation exercises. Young men who desired to enter the ministry in his church were welcomed as members of his family. In 1829 four who were thus trained by him were ordained and four others were ready for orders. He urged upon the eastern churches the importance of establishing a theological

seminary in this neighborhood. The petition drawn up to this end was referred to a committee which reported favorably upon it and a resolution was passed sanctioning it. But no good results came from it, for while the West was aroused the East had not yet awakened to the importance of lending an assisting hand. But the rector, with his many accomplishments, made himself felt in the eastern conventions of the church, and in 1832, was elected to the Episcopacy. When he left Trinity it was one of the great powers of the church. Three out of four of his immediate successors were also elected bishops.

Christ Church in Allegheny was founded in 1830, for by this time the town of Allegheny was almost a city. Among its early rectors was Edward Y. Buchanan, a brother of President James Buchanan. As late as 1857 it was in a feeble condition, for Trinity overshadowed it in a way that the new blood was nearly all turned there. While yet languishing Rev. David Carter Page became its rector. He had achieved just renown in the East and although past the age when most men show their greatest powers, he had still a commanding appearance, polished manners, and was furthermore a most eloquent reader and preacher. Under his work the old church was remodeled and improved and very rapidly moved up to the first place among the churches of Pittsburg after Trinity Church. Another church was founded at Laceyville, now in Pittsburg, which was named St. Paul's at the same time that Christ Church was founded in Allegheny. Dr. C. W. Andrews, who afterwards became eminent in church work, was its leading rector. Finally there appeared in all the Episcopal Church in Pennsylvania and vicinity a large number of members who held what was known as "low church" views, the difference consisting mostly in the ritual observances. This element grew stronger each year and in 1837 emphasized their strength by forming St. Andrew's Church. It was a church of great power even at its formation and made itself felt in all church work. It is yet one of the wealthiest and leading churches of the cities. Pittsburg was increasing rapidly and as new centers sprung up one after another came new churches such as Grace Church, Mt. Washington; St. James' and St. John's Churches, Pittsburg; St. Mark's in Birmingham, etc. In 1850 old Trinity Church, built in 1825 by Bishop Hopkins, was under the rectorship of Doctor, afterwards Bishop Lyman, and though it seated about a thousand people it was too small for the congregation. They accordingly built St. Peter's Church but a short distance from it. It was built for the overflow of Trinity and was what is known in England as a "Chapel of Ease" for that church. The intention was that the two churches should form but one parish and be ministered to by the same rector or rectors, they belonging equally to both. The edifice was of pure gothic style of architecture, which was then rapidly becoming popular in the United States. St. Mark's Church in Philadelphia had been recently built and St. Peter's of Pittsburg was fashioned after it. When built it was the most stately and beautiful church west of Philadelphia. Dr. E. M. Van Deusen,

of Wilmington, Delaware, was its first rector. With its beautiful architecture, fine furniture and eloquent reader it soon outgrew the position it at first occupied and even surpassed all other Episcopal Churches in Pittsburg. New accessions made it stronger in wealth and members each year. It soon separated from Trinity and was organized as a separate parish.

In 1856 a small parish was organized at East Liberty, where there was but a sparse population. They worshiped for a time in an abandoned Methodist church. But this section soon became a most popular one, and East End, as it is now called, became the resident section of many wealthy citizens who were thus removed from the smoke and bustle of the city. The new organization there was called Calvary Church and is now perhaps the leading church of the Episcopal faith in the city. Its upbuilding was a loss to the older churches of the city; especially was this true of Trinity and St. Peter's, which were so close together that neither could retain their former power or membership. The Episcopal Church increased very rapidly between 1850 and 1860 in the cities and we believe has kept up its growth in every decade since. Its rapid increase was due formerly very largely to their able and eloquent rectors, such as Dr. Lyman at Trinity, afterwards Bishop of North Carolina; the eloquent William Preston at St. Andrew's; Dr. Van Deusen, the memory of whose rounded periods at St. Peter's is still a subject of comment in Pittsburg, these accounting in some degree at least for its success. With these flattering prospects and the new life in the church work of Pittsburg, came the old question of forming a separate diocese here in Western Pennsylvania. The necessity of this movement had somewhat passed away with the completion of the railroads connecting Pittsburg with the East, for since then a bishop was at all times within ten hours' ride of Pittsburg. Its remoteness from the East was one of the reasons urged by Dr. Doddridge many years before. Furthermore, in 1828, H. U. Onderdonk had been elected assistant to Bishop White and this enabled them to give more time to the West. Alonzo Potter was elected bishop in 1845. He was a man of great energy and industry and of splendid physique generally. The results of these new forces in the field in a measure satisfied the churches in the West for many years with the old arrangement. Certain commercial discoveries in Western Pennsylvania in 1860 and 1861 greatly increased the population and particularly that of Pittsburg and surrounding cities. Bishop Potter's health failed and Samuel Bowman was elected assistant bishop. Bowman took a greater interest in the West than any who had preceded him. With all of his unrivaled powers he advocated the old movement for the formation of a new diocese west of the Allegheny mountains with a bishop of its own. While on his way to Pittsburg Bishop Bowman died suddenly. This only emphasized the important project for which he had so earnestly labored. It made the Pittsburg people more than ever determined that there advocacy of a separate diocese should never be abandoned until their petition was granted. The eastern authorities were conservative. They did not realize the greatness of

Pittsburg church interests and so delayed the matter until 1865, and it is said, even then reluctantly granted the separate diocese that Dr. Doddridge had so earnestly plead for more than a half century before. Even when the consent was given it came with a condition attached, namely: That $30,000 of an endowment of a bishopric should be raised first. Though the West claimed the condition was unlawful and unwise they complied with it at once. This requirement was but an additional evidence of the ignorance of the East concerning the West and of their general lack of faith in its real power. The general law of the church required a few other matters to be complied with and when these were arranged a convention of the proposed diocese was held in Trinity Church, Pittsburg, on November 15, 1865. This, as may be imagined, was a great day for Episcopalianism in Pittsburg and in Western Pennsylvania generally. It was nevertheless an experiment. The majority believed it would be very successful, but there were not a few who prophesied only misfortune and failure for the new diocese. These forebodings were possibly somewhat engendered by the spirited contest between two rival factions as to which should control the diocese. This struggle undoubtedly weakened the influence of all the churches for many years. Two candidates were put forth for the bishopric, the one was the Rev. John B. Kerfoot, who was then president of Trinity College at Hartford, Connecticut, and the other was Dr. Frederick D. Huntingdon, who was afterwards elected Bishop of Central New York. Kerfoot had been a teacher in St. James' College in Maryland and some of his students were leading men of Pittsburg, who did all they could for his election. He was elected on the first ballot by a large majority and in January 25, 1866, was duly consecrated in Trinity Church as the first bishop of the diocese of Pittsburg. This event was one long to be remembered in the city and indeed the Episcopalian Church throughout the country took great interest in it. Bishop Kerfoot was a man of energy and of high attainments. Unfortunately he found himself hampered from the first by the bitterness of the contest which had preceded his election. Many of his plans lagged in execution because of the want of unity in the council of the church organizations over which he presided. These differences and sharp controversies were not easily forgotten nor readily laid aside. His first attention was given to the churches in the two cities. Following the plan proposed long before by Bishop Hopkins he attempted to found a university to be called St. Augustine, in which young men could be trained for the ministry, but the scheme met the same fate that befell it when put forth by the scholarly rector of Pittsburg. He organized the City Missionary Society, composed of the churches of both cities, intending thus to unite them in the work of church extension. A building was furnished in which the bishop had his office. The building also contained a reading room and a room for night school, which was free to all. He also organized the Church Guild, the object of which was to unite the charitable work of the cities. These organizations met with but moderate success for a year or two after and both were abandoned because of a

lack of interest. The bishop had better success in strengthening the Bishop Bowman Institute, a school for girls which had been founded some years before. This is the dark side of his first few years. The church pushed into new sections and by establishing missions laid the foundation of what are now flourishing congregations. The contributions of the churches generally were increased and many other powers which had lain dormant before were kindled into action by his zeal and energy.

When Bishop Hopkins became rector of Trinity in 1825 there was but one congregation west of the Allegheny mountains and it had only forty members in it. In 1840 there were but five congregations or parishes, three of which reported 416 communicants. Ten years later, in 1850, the number of parishes was not increased, but four of the five unitedly had 520 communicants. In 1860 there were twelve parishes, six of which reported 750 communicants. The enrollment of the others is not given in the above years, but it is probable that there were from 1,000 to 1,200 members in the cities in 1860. The church grew more rapidly between 1850 and 1860 than in any other previous period of its history. The population of Pittsburg between 1825 and 1860 had increased from 10,000 to 150,000. When the diocese of Pittsburg was formed in 1866 there had been no new congregations organized within the diocese since 1859, and there were none added to it until 1868. Those already in existence had been strengthened in numbers and the amount contributed for both home and foreign mission purposes had from year to year been rapidly increasing. If the work of the new diocese was, therefore, somewhat unpromising at first, it did not long remain so. The constant work of the bishop in a year or so began to show splendid results. New churches were organized all over the city and in towns in Allegheny county then remote from it, though now many of them are intregal parts of the great aggregation of cities on the Ohio. Thus St. Stephen's Church of Sewickley, St. Thomas' Church of Verona, The Nativity of Crafton, St. Luke's of Broomfield, St. Stephen's of McKeesport, the Church of the Good Shepherd at Hazelwood came readily into being and all flourished under the care of the new bishop and the Pittsburg diocese. St. Andrew's congregation built a new church costing about $100,000, which in those days was a very large sum. In 1871 the old church which Bishop Hopkins had built, and which was the wonder of his day, was replaced by the grandest edifice of its day in Pittsburg, costing about $200,000. Christ Church was remodeled a second time and Calvary in East End had to be enlarged to accommodate the growing congregation. When the bishop began his work there were, as we have said, twelve parishes with perhaps less than 1,200 members. In fifteen years these had increased to sixteen parishes with three missions. The increase in the church was more manifest in the added strength of the parishes already existing. The membership in the cities had more than doubled in fifteen years and the amounts contributed for all purposes had shown a still greater increase. The bishop proved to be an untiring worker, not only for the upbuilding of

the church in the city, but over the entire diocese. His chief disappointment was his inability to found institutes of learning and of charity. With the wealth of the cities and of his people he thought these should have come readily and to this end he bent his every effort and without success. When he came to Pittsburg he found but one such an institution, namely: The Church Home for Aged Women and Children, and with all his labor, to the end of his days, he was unable to add to it. This undoubtedly disappointed him greatly. In July, 1881, he went to Myersdale, in Somerset county, to attend to matters connected with the church. While there he was taken sick and died on July 10. Though failing in one particular, his excessive labors in every other way were attended with great success and his memory cannot otherwise than be cherished kindly in all parts of the cities. A special convention was called some time after his death to elect his successor. This met in Trinity Church and selected Rev. Cortlandt Whitehead, D. D., as bishop of the Pittsburg diocese. He had been rector of the Church of the Nativity in Bethlehem, Pennsylvania. He was consecrated on St. Paul's Day, January 25, 1882, sixteen years exactly after the consecration of Bishop Kerfoot. The church in the cities and suburbs has grown more rapidly under his episcopacy than ever before. This was due to his constant and earnest work and also perhaps to the good seeds sown in the cities by Bishop Kerfoot. It was only under the work of Bishop Cortlandt Whitehead that the diocese recovered from the long neglect shown it for fifty or sixty years prior to 1866, when the separate diocese was formed. Pittsburg and vicinity, all included in the Pittsburg diocese, has added more to its population from the manufacturers of iron and glass than in any other direction. The immigration of iron workers, glassblowers, etc., from Great Britain who were brought up in the Church of England increased it greatly, for they very readily found their way to the Episcopal Church. The number thus added to the church in such growing centers as Braddock, Homestead, McKeesport, Wilmerding and many other places, without counting Pittsburg and Allegheny, are numbered by thousands. These are properly looked after only with a great outlay of money in establishing missions among them and without which they would soon be gathered up by other churches.

The following shows the date of organization, and numerical strength of the Episcopal Church of Greater Pittsburg, in 1907: 1818, Trinity of Pittsburg, present membership, 930; 1832, St. Paul's, Pittsburg, 154 members; 1836, Christ, of Allegheny, 366; 1838, St. Andrews, Pittsburg, 126; 1852, St. James', Pittsburg, 450; 1853, St. Mark's, Pittsburg (South Side), 150; 1855, Calvary, Pittsburg, 1330; 1857, St. John's, Pittsburg, 326; 1859, St. Peter's, Pittsburg, 306; 1864, St. Stephen's, Sewickley, 240; 1869, Emmanuel, Allegheny City, 350; 1872, Good Shepherd, Pittsburg, 287; 1873, St. Luke's, Pittsburg, 366; 1873, Church of Nativity, Crafton, 169; 1874, St. Thomas, Oakmont, 318; 1886, St. Stephen's, McKeesport, 459; 1889, Ascension, Pittsburg, 520; 1890, St. Stephen's, Wilkinsburg, 465; 1890, Epiphany, Bellevue,

235; 1891, St. Matthew's, Homestead; 1904, St. Mary's Memorial, Pittsburg, 177; 1904, Redeemer, Pittsburg, 46.

The total number of parishes in Allegheny county in 1907 was twenty-three, having a numerical membership of communicants of 7,804.

THE BAPTIST CHURCH.

There are so many church organizations commonly, but often erroneously, called Baptists, that it is very difficult to prepare a satisfactory account of them. They are not bound together by an ecclesiastical union, yet they are not independent organizations. It has been perhaps more aptly said that they are interdependent upon each other, joining in christian endeavor and working usually in great harmony in religious, in educational and in other branches which naturally belong to the church work. Their growth often depends on the individual exertions of a neighborhood. In some localities these efforts have taken root and spread very rapidly while in other localities even now the Baptist Church will be found but meagerly represented. The Scotch, English and Irish people who came here to found and build up Pittsburg invariably came with thoroughly fixed notions of religion and it so happened that there were among them but few of the Baptist faith. The growth of the church in Pittsburg did not for many years equal that of other churches nor did it equal the growth of the Baptist Church in other parts of the United States.

The Baptist Church was first organized in Western Pennsylvania, in Greene county, in 1777. Two ministers settled there named John Sutton and John Corbly. Shortly after this, early churches were organized at Uniontown, and in various places in Somerset county. Corbly's family was killed by the Indians as they were on their way to church. The first Baptist Church in Allegheny county was organized at Peters Creek, about twelve miles south of Pittsburg, on November 10, 1773. It still exists in all its strength as a rural church. Occupying its third edifice, it celebrated its centennial a generation ago. Among its early ministers were David Phillips and Dr. James Estep. Rev. William Shadrack, D. D., began his long life of ministerial services with them. The first church of this denomination in Pittsburg was organized in April, 1812, when the city had about five thousand people. It was an independent organization and included about six families with perhaps not more than twelve people in all who had come from New England. The chief organizer and pastor was Rev. Edward Jones, also from New England. The society was too poor then to build a church, but worshiped in private houses and in rented halls. For many years the church was subjected to alternating periods of prosperity and adversity. Dr. Alexander Campbell was the founder of a denomination erroneously called "Campbelites," but known now as the Christian Church. His influence in inducing people to accept the faith he advocated caused great trouble in the little struggling band of Baptists in Pittsburg. The church in Pittsburg was chartered in 1822. A

charter member, the first on the list, was Sidney Rigdon, who afterward embraced Mormonism and became somewhat noted because of his associations with Joseph Smith. It is claimed, we believe, that the "Book of Mormon" was secured for the world through the instrumentality of Sidney Rigdon, from the fact that an unpublished work of Solomon Spaulding, well known among the Mormons as "Manuscript Found," came into the possession of Rigdon, who being a printer by trade, set it up in type and thus it was used in making up the "Book of Mormon." Friends of Rigdon, however, always claimed that he was a man of high integrity, who would not intentionally perpetrate any fraud. He died in 1876 at Friendship, in Allegheny county, and had at that time the respect of all who knew him. In his youth he had been taken into the Peters Creek Church, being baptized by Rev. David Phillips. He became a member of the First Baptist Church of Pittsburg, and was for a short time its pastor. He was silenced from preaching by a council of Baptist ministers because he was teaching baptismal regeneration and other doctrines contrary to the accepted belief of the church. Such incidents as this greatly retarded the growth of the church in Pittsburg.

Rev. Samuel Williams became pastor of this church in 1827 when, from his report, there were but thirty-seven members, though there were probably many more Baptists in and near Pittsburg. He remained pastor for twenty-eight years and they were prosperous ones in the upbuilding of the church. In 1843 there were four hundred and fifteen members reported and many had gone out to form new church organizations. The pastor exerted a wide influence and very early began preaching against slavery, even when most ministers were silent on the subject. He lived to preach sixty-three years and died in New York in 1877, one of the most revered men of his day. From this first church came, directly or indirectly, nearly every church in and around Pittsburg. Some that were formed from it are extinct now or united with other organizations, so that its influence has been very great, but at the same time hard to trace. In 1841 Grant Street Church was organized and Rev. N. G. Collins was made pastor. Among its organizers were some who were leaders in the business and philanthropic interests of the city. Among these were B. L. Fahnestock and John Owens. In 1846 Rev. T. C. Teasdale was pastor and secured the services of the then noted Jacob Knapp, who came here to preach a series of sermons in the Grant Street Church. As a result of his work two hundred and eight were baptized and taken into full membership. About that time a number of members withdrew from the Grant Street Church and formed the Berean Church. This was carried on separately for four years, when they united with the Grant Street Church under the name of the Union Church. The new church developed great power, for many of the stronger men of both cities were members of it. It had also very able men as ministers, among whom were Doctors Shadrack, Dickinson, Sawyer, Young and Herr. In 1873 another union took place whereby Union and First Street went together and formed the Fourth Avenue Church. The

united congregation occupied the building of the First Street Church and proceeded to sell the property of the Union Church. It was purchased by the Reformed Presbyterian Church and of the monies secured from its sale, ten thousand dollars was invested in a Church Extension Fund of the Pittsburg Association. The First Church, which the congregation continued to occupy, was located on Fourth avenue. They had erected a brick church in 1833 on the corner of Grant and Third avenue, which cost them about four thousand dollars. It was destroyed by the great fire of 1845, and was replaced by an eight thousand dollar building which was afterwards sold to a Jewish congregation. Rev. J. S. Dickerson, D. D., was then pastor and by his advice and help, a lot on Fourth avenue was purchased and a stone structure was put up, costing about forty thousand dollars, which included also the price of the lot. This was dedicated in 1867. Dickerson was folowed by Dr. Rowland, and both were eminently successful in church work. The latter was called finally to the pastorate of the Tenth Street Church in Philadelphia. Rev. R. W. Pearson was the first pastor of the United Church after the union of 1873. He was a man of much power and eloquence in the pulpit and very soon the church was unable to accommodate the congregations. It was then decided to erect a new edifice fronting on Ross street. This was done at a cost of eighty-six thousand dollars. Its seating capacity was about thirteen hundred and it was dedicated on November 20, 1876, by Rev. Dr. E. G. Robinson, who was then president of Brown University. Dr. Pearson was succeeded in 1879 by Rev. J. H. Hartman and in a short time the entire debt which had been incurred in building the church was paid in full.

In 1882 Rev. Lemuel C. Barnes became pastor and while he remained the church developed more rapidly than in any previous period of its history. It has contributed large amounts to weaker fields and to establishing missions in other parts of the city. Mr. Barnes finally moved to Massachusetts and was succeeded by Rev. Howard B. Gross, of New York. An associate pastor was also necessary by this time, the first being Rev. E. T. Fox, of Erie, Pennsylvania. The church is now nearly a hundred years old, and its present membership is very large. In 1835 fifteen members of the first church united in forming an organization in Allegheny Town, then a place of about four thousand people. Dr. Shadrack was then a young man and a student in the Theological School, which occupied what is now called Monument Hill in Allegheny. Upon his graduation he became their first pastor. Dr. James Estep and the afterward venerable Samuel Williams assisted in the organization of this church. It has had a continuous history ever since. It was named the First Baptist Church of Allegheny, but has long since been known as Sandusky Street Baptist Church. For some years the organization held its services in a room of the Pittsburg Academy which was located in the present park grounds near Marion avenue. As soon as they were financially able they erected a frame building. In 1843 they erected a building on Sandusky street and this, by being remodeled several times, lasted them many

years. Early workers in the church were such as Wright, Trevor, Lippincott, Morgan, Beck, etc. The earlier pastors were such men as Collins, Downer, Taylor and Sawyer. In 1859 Rev. A. K. Bell, D. D., became pastor and served eleven years. He was a man of great natural ability and energy in church work and almost from the beginning the membership began to increase rapidly. He resigned in 1870 and was succeeded by Rev. B. F. Woodburn. In 1867 a number of members of the Sandusky Street Church united to form the Nixon Street Church. Its first pastor was Rev. A. S. Kirk, and after him came Rev. J. S. Houston, who served them many years. Rev. John Brooks was afterward pastor. In 1868 sixteen colored members of Sandusky Street Church united to form the first colored Baptist church in either of the cities. Since then many others have been formed, such as Green Street Church in Allegheny, Ebenezer in Pittsburg, the Tabernacle in Allegheny, Antioch in Pittsburg, Siloam in East End, Shiloh in Allegheny, etc.

A church was organized on Mount Washington in 1874, which grew out of a mission school established there largely through the efforts of Mr. W. T. Drummond, of the Sandusky Street Church. The church has had a number of able pastors, among others being Revs. McKinney, Blaine, Macrary and George T. Stout. As early as 1826 a Welsh Baptist Church was organized in Pittsburg from members from the First Church. They procured an humble edifice on Chatham street. Their pastor, Rev. William Owens, conducted services for some years in the Welsh language. New life was later given to the congregation by English pastors. In 1862 a German Baptist Church was organized and it has since been very successful. They have a church on Nineteenth street, South Side. In 1896 two churches, known as South Pittsburg and East Birmingham churches, united and were afterward known as Union Church. In 1856 a church known as Thirty-seventh Street, Pittsburg, was established. In 1873 a church was organized and an edifice built on Penn avenue, East End. The church did not prosper and was finally sold to pay its indebtedness. Later a property was purchased on Shady avenue. They have now a flourishing church. An important church is the McKeesport Baptist Church. It was formerly called the Forks of the Yough Church, and was organized in 1820. There is also a Sharpsburg Baptist Church, formerly known as the Deer Creek Church. In more recent years churches have sprung up in Mansfield, Braddock, Homestead, Sewickley, Fair Oaks, Industry and in nearly every other suburb of Pittsburg.

The Baptist denomination has the following churches in the cities and boroughs of Allegheny county; the figures following the name indicates the 1906 membership of the church: Center Avenue, Pittsburg, 94; First German, Pittsburg, 400; Fourth Avenue, Pittsburg, 730; Forty-sixth Street, Pittsburg, 83; Homewood, Pittsburg, 107; Johnston Avenue, 162; Lorenz Avenue, 156; Maple Avenue, 171; Mt. Washington, 192; Oakland, 289; Second German, 80; Shady Avenue, 498; Union, 500; Wylie Avenue, 120; Beth Eden, Allegheny, 322; Emmanuel, Allegheny, 134; First German, 69; Sandusky Street,

Allegheny, 454; First Church, McKeesport, 704; First Swedish, McKeesport, 196; Fifth Avenue, McKeesport, 293; Braddock, 133; Carnegie, 80; Coraopolis, 81; Crafton, 98; Duquesne, 119; Elizabeth, 150; Homestead (First), 535; Homestead, First Hungarian; McKees Rock, 49; Oakmont, 162; Pitcairn, 42; Sewickley, 133; Sharpsburg, 274; Swissvale, 36; Tarentum, 195; Turtle Creek, 195; Wilkinsburg, 324. The total number of communicants in the churches named is 7,629. The number of church organizations is twenty-nine.

CHAPTER XVIII.

CHURCHES CONTINUED.

The Reformed Presbyterian Church—The Cumberland Presbyterian Church, Etc.

This organization, in both Scotland and the United States, is descended from the Church of Scotland as it existed in the period of the second reformation. The cause which led to its formation originated with King Charles II. He had given his solemn promise, if not his oath, to uphold the Presbyterian or established Church of Scotland and on this condition, gained the throne of England. Almost at once, upon his accession, he broke his promise or oath and endeavored to undo both the ecclesiastical and civil work of the Reformation. Campbell, Cargill, Renwick and others protested boldly against his actions, and bad faith, and declared him a traitor to his promises and to their church. For this they were outlawed and put to death and their followers were persecuted even until the accession of William of Orange, in 1689, after which they enjoyed the liberty of worship to which they had been entitled under the promise of Charles II. Some of them, in the meantime, had come to Pennsylvania. In 1743, many of the faith met at Middle Octorara where they, with great solemnity, renewed the old Scottish covenants. In 1752, Rev. John Cuthbertson was sent from Scotland to be their minister. In 1774 Rev. Linn and Dobbin of the Reformed Presbyterian Church of Ireland joined them in their colony and these three ministers, Cuthbertson, Linn and Dobbin, with a few adherents, organized the Reformed Presbyterian Presbytery. In 1782 they were united with the Associate Presbyterians, who came here from Scotland as dissenters, and founded the Associate Presbyterian Church, which later, in 1858, became one of the two church organizations, uniting in Allegheny City to form the United Presbyterian Church. But in 1782, many of the more obstinate Scotch refused to join them in the union of that year and these, by adding to their numbers, received a minister from Scotland in 1792. In 1798 a Presbytery was organized by them, in Philadelphia, called The Reformed Presbytery of the United States of America. In 1809, this body organized the Synod of the Reformed Presbyterian Church in America with three Presbyteries under its control. It also founded a school in Philadelphia, in which to educate its ministers. From 1812, the relation of the Convenanting Church to the government of the United States was a question that was widely discussed

among all its adherents. It was felt, by many, that it was unjust to prohibit the membership of this church from performing the duties and exercising the privileges of the American citizenship. This, they claimed, might have been right under the rule of Charles II, but it was not justified under the government of the United States. In 1833, many of them withdrew from the church and formed the General Synod of the Reformed Presbyterian Church. These, in their day, were called "New Lights" and they took with them the Theological Seminary founded by the church in Philadelphia. Those who remained, after the others had withdrawn, were not disheartened, but proceeded to enforce their peculiar views of religion so far as their relations with the government were concerned, more rigidly than ever. In 1840, they established a Theological Seminary in Allegheny City, Pennsylvania. Each member covenanted anew to adhere to the principles of the Reformed Presbyterian Church, which practically forbade them from becoming active American citizens. They did not vote; they did not enlist in the army, nor accept public positions under the government, nor serve on juries, nor did they in any way, take part in the political system of the United States government. These peculiar ideas were founded on the theory that the organic law, as they said was "Godless," for neither the word God nor Christ was used in the Constitution of the United States.

The First Reformed Presbyterian Church of Pittsburg, long afterwards known as the "Oak Alley Church," was organized in 1799. Rev. John Black, an Irishman of considerable intellectual force, who had been graduated from the University of Glasgow, was its first pastor. He had been licensed in New York and came at once to Pittsburg, where he began to preach in December, 1800. He included, in his ministry, all societies of the same persuasion in Western Pennsylvania. He preached here until his death on October 25, 1849. When the disruption of the church, in 1833, came he and his church seceded with the "New Lights" party and the severe doctrines adopted by the church relative to the holding of office, etc., were not carried out by him and his followers after that. He was succeeded by Rev. John Douglas, D. D., in May, 1850, who preached for the congregation and served them most ably for twenty-three years when he resigned and joined the Presbytery of Pittsburg of the Presbyterian Church. Rev. William Young succeeded him and preached for four years, when he was compelled to resign because of his ill health. He died a short time afterward. Rev. Nevin Woodside was then put up as a candidate for the place left vacant when Mr. Young resigned by a part of the congregation. The remainder of them were, however, opposed to his election. His final selection brought about a division of the church. Woodside was prohibited from preaching by the ecclesiastical courts, but he continued to minister to a few adherents of the old church who claimed to be the Reformed Presbyterian Church of Pittsburg. A long litigation followed which certainly destroyed the usefulness of both congregations. Rev. S. W. Douglas became the regular successor of Mr. Young, but he resigned in 1886 and joined the Pittsburg Presbytery of the Presbyterian Church. In 1870, a

number of churches of the Reformed Presbyterian faith became offended at the action taken by the ecclesiastical authorities of the church with reference to George H. Stewart and his pastor, Dr. Wiley, of Philadelphia. They had begun to use, and were using, other poetical compositions than the Psalms of David in their divine worship, and for this were severely censured by the general authorities of the church. Those who were offended accordingly withdrew and united themselves with the Presbyterian Church.

This church, like all churches which originated in Scotland, has paid great attention to educational work and particularly to the education of its ministry. With the division of 1833 the the old side party was left without a theological school in 1836 they tried to organize one at New Alexandria, Pennsylvania. This project was abandoned and two Seminaries, one at Coldenham, New York, and one in Allegheny City, the latter under the supervision of Dr. J. W. Sproul, were organized. In 1840, both seminaries were united in Allegheny with Drs. Wilson and Sproul as professors. In 1845 it was removed to Cincinnati with Dr. Wilson in charge, but it was suspended in 1851. In 1856, it was re-organized in Allegheny City and has been successful ever since. They also founded Westminster College in November, 1848, founding it as a school in which to prepare their young men for entering the Theological Seminary and as a school of general education. It was at first located at Wilkinsburg and in 1850 removed to Allegheny. In 1858, it was abandoned and its property was added to the Theological Seminary. In place of Westminster College, Allegheny City College was founded with Dr. John Newell as president. In 1861, Prof. J. R. Newell took charge of this college and in 1863 it became the Newell Institute.

The religious paper or official organ of the Reformed Presbyterian Church in the United States is the *Reformed Presbyterian and Covenanter*. Under the editorship of Dr. J. W. Sproul and Dr. Wilson it became a church paper of high standing and power. The Central Board of Missions is also an offspring of this church and has its headquarters in Allegheny. The Reformed Presbyterian Churches under the Synod of the Reformed Presbyterian Church of the United States of America are also extensively represented in Pittsburg.

The Reformed Presbyterian—Covenanters—Churches of Greater Pittsburg, were organized as follows:

1833, Allegheny; 1848, Wilkinsburg; 1865, First Reformed of Pittsburg; 1870, Central Reformed of Allegheny; 1887, East Liberty Reformed Presbyterian, besides the Eighth Street and Grant Street, Pittsburg churches formed at a later date.

THE CUMBERLAND PRESBYTERIAN CHURCH.

When the "Great Revival of 1800" began on the frontier of Western Pennsylvania, a Presbytery in Kentucky called the Transylvania Presbytery, delegated a member of its more prominent members, who were not educated ministers, to look after and preach to its membership in and around Pittsburg.

Authority was given them to talk in public to audiences and to some was given authority to preach regular sermons. The Transylvania Presbytery was divided by the Synod of Kentucky in 1802, the new one formed being called the Cumberland Presbytery. A year after its formation the Cumberland met and ordained two of these laymen, whom the old Presbytery had authorized to preach, and they also licensed a number of others. The laymen ordained were Finis Ewing and Samuel King. These proceedings were perhaps irregular and complaints were made before the Synod. When it met in 1805, a commission was appointed which visited this region and called the Presbytery and Messrs. Ewing and King together. The commission advised these irregularly ordained ministers to submit to an examination. This was refused, presumably because they were not educated men and could not hope to be successful. The Presbytery endorsed their refusal on the ground that they were already ordained and the time for examining them was past. The commission thereupon prohibited them from further exercising their functions as ministers until they should submit to an examination and be regularly admitted to the sacred offices they then held. This branch of the church called themselves "revival members." They sent a statement of their side of the controversy to the general assembly, but the action of that body was to sustain the action of the Synod. The assembly also dissolved the Cumberland Presbytery and annexed its members to the Transylvania Presbytery. At last the irregularly ordained ministers, in order to reconcile the growing dissent, agreed to submit to an examination with the understanding that they would be received into the body notwithstanding the manner in which they would pass; this proposal was declined. Matters progressed in this way, the irregularly ordained ministers undoubtedly adding strength to their people, until February, 1810, when Ewing and King, who had been silenced by the Synod, arranged with an old and revered minister, Rev. Samuel McAdow, to organize themselves into what they called the Cumberland Presbytery. The Transylvania Presbytery on its first meeting suspended McAdow from the ministry because of this action. The hostility against them was not all engendered by the irregular manner of their ordination. It was an age of strict construction as to doctrinal points in all churches, and these preachers, whether through ignorance of otherwise, were teaching doctrines which varied materially, as the main body thought, with those laid down by the church. The growth of the church was quite rapid, though more particularly in the southwestern states. Their belief is very like the Presbyterian doctrine. They seemed to take a middle ground between the general doctrines of the Reformed Churches, as set forth in the confessions of the reformation period, and the beliefs of Arminianism. The Cumberland Presbyterians have revival meetings, protracted meetings, camp meetings, etc., all of which grew out of their early experience in church life on the frontier. The church founded Cumberland College in Princeton, Kentucky, but it was closed at the opening of the Civil war in 1861. Waynesburg College at Waynesburg, Pennsylvania, is yet under the dominion of this church and has at all times

done good work, taking a class of students, at low rates of boarding and tuition, who could not afford a more expensive school, and yet giving them the benefit of teachers who have had long years of experience as educators.

Some members in Western Pennsylvania in 1831 wrote to the president of Cumberland College asking that representatives of the Cumberland Presbyterian Church be sent to them that they might learn more of its doctrine. The General Assembly of the church accordingly sent Rev. A. M. Bryan to Pittsburg. He began work here as a street preacher, but in 1833 organized a church which, by his care and supervision, continued to grow. A lot was purchased on Sixth street and a plain brick church with a seating capacity of about five hundred was built. Rev. Bryan gave his life to the work and even died while holding a protracted meeting in the church. Immediately upon his death feuds and dissensions broke out and other misfortunes came, so that the church has never since seen the days of glory and prosperity it experienced under its first pastor and founder. In 1886 the old church on Sixth avenue was sold to the Duquesne Club and two years later a lot on Wylie avenue was purchased and a church erected on it. There is also a Cumberland Presbyterian Church at McKeesport, and in 1883 a mission was organized in Allegheny City. In the Sixth Street Church Mr. Bryan was followed successively by the following ministers: Rev. Jacobs, Rev. S. F. Stewart, Rev. Dr. E. K. Squires, Rev. Dr. A. Templeton, Rev. W. H. Black, Rev. Samuel McBride, Rev. J. M. Habbert and Rev. N. D. Johnson. There are in Pittsburg the First, Second and Third Cumberland Presbyterian Churches.

THE REFORMED CHURCH.

The Reformed Church of the United States was formerly called the German Reformed, though the proper name now is as given above. It represents a branch of the church which originated in the Protestant reformation in Germany where it had its strongholds in the provinces on the Rhine. They accepted the reformation doctrine as set forth by Melancthon rather than by Luther in 1559 in the days of Frederick II. They began forsaking their homes on the Rhine and coming to America in greater numbers in the days of William Penn, being induced to do this partly because of their liberal offers of land in Pennsylvania and partly because of the seemingly endless oppression and of petty warfare to which the disorders of that day in Europe subjected them. In Pennsylvania their condition generally was not an enviable one. There were but few ministers in America who could preach to them, for they understood only the German language. Some authorities say there were but three or four German ministers in the entire country between 1727 and 1747. They were equally without schools and without books save a few bibles and hymn books printed in the German language which they had brought with them. Their neighbors here were nearly all English speaking people, mostly Scotch-Irish, who had a natural hatred for the German population. Had it not been for their natural religious tendencies their children would have grown without intellectual or religious training. In 1746 Rev. Michael Schlatter, a Re-

formed minister from Switzerland, was sent to America by the Synods of North and South Holland to preach and labor among the German settlers of the Reformed faith. He was a zealous and energetic worker and visited all the German settlements in Virginia, Maryland, New Jersey and Pennsylvania. In September, 1847, he went to Philadelphia and there on September 29, practically formed the first Synod of the Reformed Church in America. It was composed of five ministers and twenty-six elders, who represented about forty-six religious settlements or churches. The Synod thus formed was under the jurisdiction of the Synod of Holland and continued to be thus governed until 1793. All of its proceedings in the meantime were sent to Holland for confirmation or refusal of sanction. In 1793 the American Synod resolved to thereafter govern itself. They had thus far been regarded and called a "Coetus." They now formed and adopted a constitution which gave them the name of Synod. They were no longer the "Neider-Deutsche" but the "Hock-Deutsche Reformirte Kirche in den Vereinigten Staaten von Nord Amerika." Their numbers in membership began to increase very rapidly and being naturally an industrious and economical people, they increased their financial standing as well. In the selection of their ministers the church did not exercise great wisdom. Ignorant themselves of most matters that were going on in the English world around them, they did not ask for educated clergymen but selected young men, many of whom had but little training save what they received from older pastors, some of whom had been educated in Europe. This weakened the church a great deal and gave it even a lower standing than it really deserved. In 1835, after existing for thirty-two years without a school in which they could educate their ministers, they formed a Theological Seminary at Carlisle and shortly afterwards removed it to York, from which place it was finally located at Mercersburg, where it still holds forth. Since then the church has steadily grown and advanced in general intelligence. It has grown perhaps more rapidly in the West than in the East. The General Synod, which met at Lancaster in 1878, changed its name by dropping the word German and leaving it as stated in the beginning of this sketch.

The Reformed Church of the United States is represented in the city and environs by the following church organizations:

Christ Church, with present communicants, 81; Grace Church, organized 1854, present membership 475; St. Mark's; St. Paul's; Church of the Ascention, present membership 167; Homestead (First) has membership of 63; Homestead (Hungarian); Cavalry, Turtle Creek, membership 200; Grace, of Duquesne, membership 63; McKeesport, (First), 104; Trinity, Wilkinsburg, membership 486; St. Luke's, Braddock. The total membership of this denomination in the United States is 279,483.

THE JEWISH CHURCH.

The Jews in Pittsburg formed their first regular organization when they began to meet for worship in Lawrenceville about 1842. Services were held

on their Sabbaths and the principal days observed by them in private houses, but later in larger halls such as they could procure. The Jewish population of Pittsburg was then mostly composed of Germans and all continued to worship in this way until 1850 when a more substantial congregation, called Rodef Scholon, was organized. Its first place of worship was in a church on Sixth street in which they remained until the Synagogue was completed on Eighth street, in 1860. This temple supplied their wants until 1888 when it was remodeled, modernized and enlarged. They had been served by Revs. Sulzbacher, William Armholt, L. Naumberg and Dr. L. Meyer. It also has a school for religious instruction and in the temple are rooms for societies which labor in the interests and for the relief of the poor. In 1865 another congregation, Ez Chazi M., meaning the Tree of Life, was organized. It worshiped on the corner of Second and Market streets until 1880, when it was able to purchase a Baptist Church on the corner of Fourth and Ross streets. This they refitted and adapted it to their use. The first Rabbi in this church was Rev. A. Bernstein. There are also two congregations of Russian Jews, both of which have fine temples of worship and able Rabbis. They were organized late in the eighties. Of these congregations the one on Eighth street is called a Reformed congregation while the others are Orthodox. There are many potent eleemosynary societies kept up by the Jews, the greatest of which is the Relief Association of Allegheny county, which ministers to all who are in need.

In 1907, there were the following Jewish Synogogues in the combined cities, wherein reside about 45,000 Hebrews:

Beth Jacob; Beth Hamedrosh; Rodeph Shalom; Galician Congregation; Poaley Zedeck; Roumanian Congregation; Shaarey Torah Congregation; Tree of Life Synagogue; Anshal Sance; Sahro Tfilo; Shoral Zedeck.

Aside from the religious organizations already named there are the following:

The Evangelical Association has the Emanuel, Friedens, Madison Avenue, Salem and Zion churches. The Free Methodists are represented by the Anderson Street, East End, Glenwood Avenue, Mt. Washington and West End churches. The German Methodists by the First, First of Allegheny City, Park Avenue, Second. The United Evangelical Protestant German have the First, First of Allegheny City, German, St. Paul's Allegheny, United and Prospect United churches. The Church of God has places of worship known as College Avenue Church, Colored Church of Allegheny City. Other churches are the First Brethren, First Church of Christ (Scientist), First Church of Christ (Scientist) of Allegheny City, First Church of Spiritualists, First Church of Spiritualists, Allegheny City, First Dutch Methodist, First Primitive Methodists, First Unitarian, The Reorganized Church of the Latter Day Saints of Jesus Christ, Russian Greek, Seventh Day Adventists, Swedish Church, Universalist Church, Welsh Church and Swedenborgian.

In 1907 there were six Congregational churches in Pittsburg and Allegheny City, as follows:

First of Pittsburg, First of Allegheny City, Puritan, Slavic of Allegheny City, Swedish Mission, Welsh of Pittsburg.

The Methodist Protestant denomination is represented at this time by the following church organizations, in Pittsburg and Allegheny:

Birmingham, First, First of Allegheny City, Fourth, Mt. Washington, Second, Trinity of Allegheny City.

By a careful investigation, in 1904, it was found that a vast sum of money has been expended in Pittsburg for houses of worship. This brings the combined cities into much prominence in comparison with other cities of this country. During that year there were dedicated thirty-four churches in Allegheny county, the majority of which were within the city. The following shows the cost and denominations owning these newly dedicated places of worship:

Roman Catholic built six churches, valuation	$213,000
Baptist built five churches, valuation	152,000
Methodist Episcopal built five churches, valuation	146,000
Presbyterian built four churches, valuation	132,000
Unitarian built one church, valuation	80,000
Protestant Episcopal built one church, valuation	70,000
Reformed built two churches, valuation	56,000
United Presbyterian built three churches, valuation	27,000
Lutheran Church built two churches, valuation	27,000
Christian Church built three churches, valuation	26,000
Dunkers built one church, valuation	20,000
Congregational built one church, valuation	8,000
Total	$957,000

In 1905 the more than seventeen million dollars invested in churches was divided among the following denominations: Roman Catholic, $4,500,000; Presbyterian, $2,500,000; United Presbyterian, $2,000,000; Methodist Episcopal, $2,000,000; Protestant Episcopal, $1,900,000; Methodist Protestant, $800,000; Baptist, $680,000; Christian, $300,000; Reformed Presbyterian, $250,000; other denominations, $2,570,000. This gives a total of $17,500,000.

The various denominations are represented in the two cities by the following churches:

African Methodist Episcopal	11	Methodist Episcopal	45
Baptist	37	Methodist Protestant	6
Christian	11	Presbyterian	50
Congregational	5	Reformed Church of U. S.	7
Episcopal	20	Roman Catholic	72
Evangelical Lutheran	42	Scientists	3
Evangelical Association	6	Spiritualists	3
Free Methodist	5	Unitarian	2
German Methodist Episcopal	3	United Presbyterian	32
Greek	2	Miscellaneous churches	16
Jewish Synagogues	11		

The Young Men's Christian Association was formed in Pittsburg in the winter of 1853-54, ten years after the movement began in London, England. The first meeting in Pittsburg was called by Robert C. Totten, after which the various pastors of the city took great interest in the society. The first home of the association in Pittsburg was in a room over the glass warehouse of O'Hara and Denny at the corner of Market and Third streets. It grew very rapidly and a noonday prayer meeting was established in Liberty hall in 1858. The Civil war came on and most of the young men went into the Union army, hence but little was done by the Y. M. C. A. in Pittsburg, but in 1865, when the war had ended the association was re-organized and in 1869 it was incorporated. It has come to be a potent and leading factor in the civic and religious life of the city. It owns its own building at the corner of Seventh and Penn avenue, which was erected in 1883, costing $100,000. There are also branch associations at Lawrenceville, East Liberty, Twenty-eighth street and at Pitcairn, Pennsylvania.

An auxiliary, known as the Young Women's Christian Association, was formed in 1890, and is doing work along the same lines.

Besides religious instruction the Young Men's Christian Association of Pittsburg maintains night schools and gives valuable instruction in common law, public speaking, engineering, architecture, electricity, metallurgy, chemistry, architectural drawing, mechanical drawing, German, Italian, English, spelling, vocal music, bookkeeping, stenography and penmanship.

CHAPTER XIX.

CHURCHES CONTINUED.

The Catholic Church.

As has been seen heretofore, the Catholic Church was the first to hold religious services at the Fork of the Ohio. Even before the French built Fort Duquesne a Jesuit, Father Bonnecamp, who accompanied Celoron in 1749, had held services there. When Contrecoeur and his forces drove Ward and Frazier from the fort they were constructing at the point, they had with them, according to the general custom of the French, a chaplain, who held regular services among them from that time on as long as the place remained in the possession of the French. This chaplain was the Rev. Denys Baron, a member of the Recollet Branch of the Order of St. Francis. He kept a register of baptisms and interments while the French remained here. It is yet in existence and is the oldest and one of the most valuable documents relating to this section. We have already quoted from the translation of it, made by Rev. A. A. Lambing, LL. D.

When Forbes' army took possession of the fort, the missionaries and their adherents had abandoned the fort and the Catholic religion was almost, if not quite, without any members in this section. Gradually as the western part of the state was settled, the Catholics gained a foothold, but the church met much opposition in this strongly Calvinistic section. In 1784, however, their numbers had increased sufficiently to warrant them in sending one of their members, Felix Hughes, to the superior of the clergy in the United States at Baltimore, asking that a priest be sent to minister to them at least part of the time. By this time there were seventy-five families along the Chartier's creek, in the Monongahela Valley and at Pittsburg, so that under the circumstances their number had increased surprisingly. Priests were scarce then and their request could not be complied with. Kentucky was being rapidly settled and there were still old French settlements in Illinois and occasionally priests on their way from the East to one or the other of these sections stopped at Pittsburg, to minister to these scattered people. Under such conditions many of them grew indifferent, abandoned their religion and neglected even their duties when the priests were present. It is probable that

the first to pass through Pittsburg and minister to the Catholics in this way was the Carmelite Father Paul, who came in 1785. Another was the Rev. Charles Whalen, a Capuchin, who stopped and remained a short time in 1787. In 1792 the Rev. Benedict Joseph Flaget, afterwards the first bishop of Bardstown, Kentucky, remained here for some weeks. His stay was in part by necessity, for he was waiting for high water in the Ohio to bear him to the Southwest. General Wayne's army was here at that time and many of his soldiers were of French descent, therefore Catholics, and to these and all others whom he could collect, the pious sojourner ministered the sacred rites of his church. In 1793 the Revs. Barrieres and Badin were at Pittsburg, and remained from September to November. The Rev. Michael Fournier, who was on his way to Kentucky in the winter of 1796 and 1797, was here fourteen weeks, being detained by the frozen rivers. He held services on Sunday, but so long had the Catholics in this section been neglected, that only six people out of more than a hundred came to attend mass. There is, however, another side to this story of indifference manifested by them. These priests were nearly all French, who had little or no knowledge of the English tongue, and the Catholic citizens in this section generally understood only our language. Two other priests, Fathers Maguire and Bodkin, spent the same winter in Pittsburg. The people were talking then of sending another petition to the Bishop of Baltimore, for all of Western Pennsylvania was under his jurisdiction, asking again for a resident pastor. They were also contemplating the erection of a church in Pittsburg. The Rev. John H. Dilhet was here for a short time in 1798 and found them still without a resident priest. He wrote to the bishop in their interests, but nothing was done for them at that time. There is no record that the pastors at Sportsman's Hall, now St. Vincent Archabbey, about forty miles east of Pittsburg, where a priest resided since 1790, visited the congregation regularly before 1798. During that year the Rev. Patrick Lonergan, who was then at Sportsman's Hall, withdrew with a number of families on account of some church difficulties and formed a settlement in Greene county, not far from Waynesburg. From his new location he visited Pittsburg at intervals for about two years. In 1799 the Rev. Peter Helbron came to Sportsman's Hall and shortly after, ministered to the Catholics of Pittsburg, and once or twice each year until 1806, when the Rev. William F. X. O'Brien visited the place once a month from Brownsville. During this time, in 1804, the saintly Apostle of the Alleghenies, the Rev. Demetrius A. Gallitzin, brought the consolations of religion to the little flock. These missionaries, when in the city, lodged in the house of Colonel, afterwards General James O'Hara, who had once been a member of the Catholic Church, though at that time he adhered to Presbyterian tenets. He still favored the church of his fathers and kept in his residence a room known as the priests' room, and there the traveling pastors who chanced to be in Pittsburg usually put up. They held services for a time in the private residence of a man named Mc-

Fall, which stood on the corner of Liberty and Water streets, and later at various other houses in Pittsburg. At this time the really devout Catholics were few in number, yet the prospects for the success of religion in Pittsburg were flattering, and all felt confident that a resident priest could do more than anything else to help their cause. After meeting with all these disappointments they at length succeeded, in the early days of November, 1808, in securing the Rev. William F. X. O'Brien, heretofore pastor of Browns-

SPORTSMAN'S HALL

ville, as the first resident pastor of the Catholic Church in Pittsburg. He came to Pittsburg at once and established his residence on Second avenue, near Grant street, setting apart one room to serve as a chapel. His first work was to build a church which was afterwards known as "Old St. Patrick's." It stood on the corner of Liberty avenue and Washington street in front of the present Union station of the Pennsylvania Railroad Company, the lot having been donated by General James O'Hara for church purposes. The town was small, and most of the Catholic people were in poor circumstances, so that the church was built with much difficulty and doubtless with many privations. Finally Bishop Egan of Philadelphia dedicated it in August of 1811, and this was the first visit of a Catholic bishop to Western Pennsylvania.

The Catholic Church increased very slowly. As late as 1816 the Very Rev. Felix de Andreis passed through Pittsburg on his way to Missouri. He wrote to a friend in Rome that, "among a population of ten thousand the Catholics numbered scarcely three hundred. They are all generally very poor, so that the church is almost destitute of everything." The population of Pittsburg was not over seven thousand at that time, but he may have included the surrounding settlements. Father O'Brien had also to look after scat-

tered families of his people all over Western Pennsylvania, even beyond the limits of Westmoreland county. The same writer to his friend in Rome adds: "The pastor of Pittsburg has under his jurisdiction a parish nearly equal to ten dioceses and is constantly engaged in visiting his parishioners." These many duties soon injured the health of Father O'Brien, and he withdrew from his charge and returned to Maryland early in 1820. He died in Baltimore November 1, 1831. In March, 1820, Father O'Brien was succeeded by Rev. Charles Bonaventure Maguire, who had been pastor of the church at Sportsman's Hall since 1817. He was in his day a very noted man in Pittsburg. All knew him as "Priest" Maguire. He was a polished scholar and a cultured gentleman of the old school. Sociable, witty, liberal, and while as firm as a rock in his own religious convictions, he respected the opinions of others, although they differed widely from his own. Such a man could not otherwise than gain the respect of all with whom he came in contact. He was born in Ireland, educated in Germany and before coming to America had traveled widely in Europe. He had taught theology in Rome and afterwards executed some important commissions for distinguished people in Europe. The French refugees applied to him for his assistance and protection in the Reign of Terror; he was also present on the field of Waterloo immediately after the battle. To brilliant natural talents he added a marvelous power to carry out projects and these qualities, with his vast experience and thorough education, made him a master of every topic that was broached in his presence. The old academy was opened soon after his arrival and he accepted the chair of instructor in Greek and filled it for many years. Like his predecessor, he at first visited a number of places outside of Pittsburg in addition to his work here, but the city increased and the church, under his ministration, grew with it, so that his work in Pittsburg and immediate vicinity soon demanded his entire attention. St. Patrick's Church soon proved to be too small to accommodate the increasing congregation and it was accordingly enlarged about 1825. The building of the Pennsylvania canal brought a great many new Catholics to the city and the prospects of the church were so encouraging that the erection of a larger church was thought to be necessary. Measures were accordingly taken in August, 1827, looking toward the erection of a new edifice. The lot on the corner of Grant street and Fifth avenue was purchased at that time through the advice of Father Maguire, and those who have seen it grow in value in the last half century until it was sold a short time ago for $1,325,000 will not doubt his shrewdness and business ability in advising its purchase. At this time Germans had arrived in sufficient numbers to build a church of their own. The old congregation promised that if their German brethren would assist in the erection of the new building they should have the old church, and in this way the forces of the Catholics in the city were concentrated on the one great work of erecting the new church. This plan originated in the mind of Father Maguire and proved successful. Work was begun soon after and the cornerstone was laid with the beautiful ceremonies of the church, on June 29,

1829. The reader, we are sure, will be pained to learn that the great and good man was not permitted to complete this favorite undertaking of his. With the completion of the building of the canal, many laborers were thrown out of employment and removed from Pittsburg. This retarded somewhat the work on the church and it not only progressed slowly but was entirely discontinued for some months. Elsewhere we have spoken of the cholera visiting Pittsburg in 1833, and, sad to relate, Father Maguire was one of its prominent victims. He died of cholera on July 17, 1833. No priest at Pittsburg since his day, in versatile ability, in the love and respect of his people in the community at large and in the real good accomplished for the church, has equalled Father Maguire.

He was succeeded by Rev. John O'Reilly, who had been assisting him since the previous October, and he resumed work on the unfinished structure. This was completed in the spring of 1834 and was dedicated on May 4. St. Paul's was then perhaps the largest and most elegantly furnished church in America. Rev. Francis Masquelet, a Dominican Father, who acted as chaplain of the St. Clare Nuns, now organized a German congregation in the old church, "St. Patrick's." The terms, however, upon which the occupancy of it was granted by the English congregation were distasteful to many of the Germans and brought about a division of their people. The dissatisfied element purchased the old cotton factory on the corner of Liberty and Fourteenth streets, and fitted up the upper floor for a chapel, which they used for a number of years. In 1838 the differences were forgotten, St. Patrick's Church was returned to the English speaking Catholics to form a new parish, and the two united German congregations erected a new church, the present St. Philomena's.

Whilst this edifice was constructed, important events took place regarding religious matters; Western Pennsylvania became a separate diocese, and Pittsburg was chosen as the see of its first bishop. If any Catholics dwelt in or about Pittsburg before the occupation of the Fork of the Ohio by the French, they were under the spiritual jurisdiction of the vicar of London, who was represented in the American colonies by a vicar general, whom he appointed. While the French held dominion on the Ohio, the territory was part of the diocese of Quebec. After they were banished from Pennsylvania the dominion reverted to vicar of London and was governed as before. The Declaration of Independence and the Revolution did not directly affect or change the church relations of the colonies to Great Britain, but it was apparent to all that the old relations as to ecclesiastical matters and the new status of civic affairs were incongruous and could not long continue. Most of the priests of the United States were then in Eastern Pennsylvania and Maryland and these met and petitioned the Pope for a superior depending not on the vicar of London, but directly on the Holy See. The Pope saw the justice of their petition and in June, 1794, Rev. John Carroll, one of the petitioners, was named Prefect Apostolic of the American Clergy. Six years later he received also the con-

secration as the first bishop of the United States, with his see at Baltimore. In 1800 this large see was divided and four new ones were erected, one of which was in Philadelphia and included all of Pennsylvania. Soon after the increase in population and the improvement of Western Pennsylvania demanded a separate ecclesiastical organization for this promising field. In 1825, when the erection of a new diocese for Western Pennsylvania was first considered, Rev. Demetrius A. Gallitzin, a Russian prince who had been ordained priest by Bishop Carroll in 1795, ministered to a flourishing congregation at Loretto, Cambria county, and acted as vicar general of the Bishop of Philadelphia in this district. He wished to see the new bishopric established at Loretto, and his prominence gave him some standing. The location, however, was against him, and it is doubtful whether the authorities of the church ever seriously considered it. After his resignation as vicar general in 1830, the Right Reverend Francis Patrick Kenrick, then Coadjutor Bishop of Philadelphia, frequently visited the churches in this section, although the journey was much more difficult then than now. In 1835 the Catholic authorities in Western Pennsylvania took up the matter in earnest and by 1837 had all the preliminaries arranged so that they thought that they were nearing the completion of their work. But the church authorities, considering the subject still immature, acted slowly and in July, 1841, Rev. Michael O'Connor was sent to Pittsburg as vicar general of the Bishop of Philadelphia for the western part of Pennsylvania. This supplied, in some degree, the need of a bishop at Pittsburg. At length, at the Fifth Provincial Council of Baltimore, May, 1843, the bishops recommended to the Pope the erection of an episcopal see at Pittsburg and suggested that the Rev. Michael O'Connor was the one most fitted for the position. Doctor O'Connor was then in the Eternal City, asking the Holy Father to grant him permission to enter the Society of Jesus. When on his knees before the Pontiff, for this his purpose, he was nominated first bishop of Pittsburg by Pope Gregory XVI, with the words: "Rise and be Bishop first and then a Jesuit." On August 15 he was consecrated at St. Agatha's Church, Rome, and at once undertook the great task not only to rule but in reality to create a new diocese. Bishop O'Connor was then already a renowned man in ecclesiastical circles, although only in his thirty-third year. Born in the city of Cork, Ireland, September 27, 1810, he had received his early education at Queenstown, passed his college years in France and studied theology in Rome, where he became professor after his ordination to the priesthood in 1833. Six years later Bishop Kenrick extended to him a call as professor in his diocesan seminary and in 1841 entrusted him with the supervision of the churches in Western Pennsylvania. How little he coveted the honor now conferred upon him can be seen from the desire which urged him to ask the Pope for the permission to spend his life unknown to the world in the cloister. But chosen by his ecclesiastical superiors for this position as bishop he at once began to work with zeal for the new diocese of the church. While yet in Europe he secured a number of priests and religious assistants

in his great task; he arrived at his new see December 3, 1843. For the next seventeen years Bishop O'Connor governed this part of the Catholic Church, which afterwards was divided into the dioceses of Pittsburg, Erie and Altoona. As infirmities forced him in 1855 to seek health in more favorable climates, he abdicated his bishopric in 1860 and after having partly regained his former strength he entered the Jesuit Order, as a member of which society he died October 18, 1872.

The success of the church in this territory is largely due to the able administration of Bishop O'Connor, and amply proves his fitness for the position. At the time of his elevation to the bishopric the population of Pittsburg was about twenty-five thousand. There were three parishes: two English congregations, St. Paul's and St. Patrick's, of which Rev. E. F. Garland was pastor since 1840, and the German St. Philomena's, then in course of erection. Moreover, these faithful people did not all reside in the cities of Pittsburg and Allegheny. In 1860, however, when Bishop O'Connor resigned, we find the number of Catholics increased to thirty thousand, who worshipped in eleven churches, two chapels and several stations, the latter destined to become some of the most flourishing parishes in the present diocese.

This rapid increase was especially caused by the immigration of many foreigners, then principally Irish and German Catholics, whose peaceful homes in the old world had resounded with the praises of the great manufacturing city at the Fork of the Ohio. The main difficulty for the bishop was to procure men for the spiritual wants of these new arrivals and both by inviting a number of religious orders into the diocese, as well as by educating young ecclesiastics in his newly founded "St. Michael's Seminary," he was able to give them the necessary assistance.

Before we attempt to give a short account of the history of these parishes, it will be appropriate to mention the principal events connected with St. Paul's, the mother church of the Catholics in the city as well as the cathedral of the diocese of Pittsburg. On May 6, 1851, this edifice, begun by Father Maguire, was totally destroyed by fire and during the following years a much more beautiful structure took its place. The credit for its erection is largely due to the Very Rev. E. McMahon, then vicar general of the diocese and rector of St. Paul's. It was not quite completed when the solemn dedication took place June 24, 1855. As years passed by, the debt which the congregation incurred through this new church was reduced and in 1868 and 1869 the Very Rev. Father Hickey, then rector of the cathedral, had the two towers built. "Old St. Paul's," as it is now familiarly called, was considered one of the finest churches in the United States. Visitors to the city seldom failed to call in order to view its stately proportions. But its walls, first towering above the surrounding dwellings, were gradually overshadowed by mightier structures erected for commercial purposes. In fact, the entire surroundings had been changed from peaceful city homes to vast store-houses and vast office-buildings, in consequence of which the congregation rather diminished than in-

creased in numbers. This, and many other circumstances, urged the Right Rev. Bishop Phelan, fourth bishop of Pittsburg, to advise its sale in 1901 for the above named sum. Mr. H. C. Frick bought the property, and May 10, 1903, the last services were held in the venerable building. In the meanwhile the new church of "The Epiphany," Washington and Franklin streets, had been built for the Catholics in the vicinity, and work commenced on a new cathedral. By universal consent it was agreed upon to erect a church which should in some way demonstrate the rapid growth of the diocese within the last years. This church, on Fifth avenue and Craig street, is the present St. Paul Cathedral, which was dedicated October 24, 1906, by the Most Rev. Diomede Falconio, apostolic delegate to the United States, assisted by numerous prelates and clergymen. The style of this Greatest Church of Greater Pittsburg is like that of its predecessor, Gothic, but of purer design and with just pride must every God-fearing citizen of the busy city look upon this artistic form of Bedford limestone as he passes it in going to or coming from work.

ROMAN CATHOLIC CATHEDRAL

The interior furnishings, however, yet surpass the outward design in many respects. The ceiling, which overspans an area of 205x100 feet, is supported by four rows of pillars rising toward the nave, an arrangement which gives the structure an air both of solidity and of gracefulness. This architectural feature is unique in cathedral building in this country. Sixty-six stained-glass windows contain symbols of articles of faith or exhibit the pictures of some of the greatest saints of the Catholic Church. The altars are of Italian Carrara marble and the Stations of the Cross are original designs cast in the best Roman bronze. In one word, St. Paul's Cathedral has become one of the monumental buildings of Greater Pittsburg, and is by far the most magnificent temple of religion in these cities.

The second church of the English-speaking Catholics in Pittsburg which existed at the time of the erection of the episcopal see, St. Patrick's, met with a similar fate as St. Paul's. In 1854 fire, which had broken out in a neighbor-

ing machine-shop, destroyed the original edifice on Eleventh street, whereupon a new church was built on Fourteenth street and later, when the Pennsylvania Railroad Company bought this property in 1865, the congregation erected a third, the present St. Patrick's, on the corner of Seventeenth street and Liberty avenue.

From these two parishes a number of other English congregations came forth. In Pittsburg, St. Bridget's started in 1853. The original modest structure has since been supplanted by a much larger edifice. Father Tuigg, later third bishop of Pittsburg, was the first pastor of this congregation. In 1854 the Catholics residing in Lawrenceville united to put up St. Mary's Church on Forty-sixth street. It was erected under the supervision of the Rev. A. P. Gibbs, who acted as pastor until his death, more than thirty years afterwards. The present and larger church, however, is of more recent date. In the same year, on the South Side, St. John's Church on Fourteenth street, and St. James,' in Temperanceville, were dedicated. These two churches have well kept pace with the general improvements in that district, and the present generation there attends services in two new and handsome stone structures. In 1857 the Theological Seminary, one of Bishop O'Connor's favorite undertakings, was removed to Glenwood, on the Monongahela. From that time the reverend professors tended to the spiritual needs of the few Catholics in the neighborhood and used the chapel of that institution as a place to hold services. As these faithful people increased in numbers, in 1873, they were able to build the handsome St. Stephen's Church, Twenty-third ward. In the same year also St. Agnes', Fifth avenue, was dedicated and is now one of the foremost churches in the diocese.

In Allegheny the first church built for the population of the English tongue was St. Peter's. In September, 1848, a movement began among the Catholics of "Allegheny Town," as that district was then called, to build churches of their own, instead of crossing the river to attend divine services with the Pittsburg congregations. This is the beginning of the two most prominent churches in that district, St. Peter's and St. Mary's. Whilst the latter, the German Church, was dedicated during the same year, the English brethren fewer in number, bought lots in the following spring and St. Peter's, on Anderson street, was opened for the first services in April, 1850. From that date this congregation rose at once into prominence, since four exceptionally gifted pastors guided it during the subsequent decades. Three of them became bishops: The Right Rev. James O'Connor, Bishop of Omaha, The Right Rev. Tobias Mullen, Bishop of Erie, The Right Rev. Richard Phelan, fourth bishop of Pittsburg, and the fourth incumbent, although not raised to such a dignity, will ever remain one of the most illustrious men connected with the administration of the first bishop of Pittsburg, the Very Rev. Edward McMahon, vicar-general of the diocese from 1852-1863. When Allegheny became a separate diocese, St. Peter's Church, then newly built on Ohio street and Sherman avenue, was made the pro-cathedral

of the new bishopric. After the reunion of the two sees in 1889, it is true, this church lost that place of honor but not its rank as one of the most beautiful churches in the city. This was built in 1886, after the destruction of the former edifice by fire. From St. Peter's a number of other congregations descend, the principal ones being St. Andew's in 1863, and the Church of the Annunciation, Norwood avenue.

Another church which is not strictly within the city limits and yet must look back to St. Paul's for its beginning, is St. Philip's, Crafton. The modest chapel in that suburb was dedicated by Bishop Kenrick in 1839, and priests from the Cathedral for a number of years said mass there once a month. Now St. Philip's is a very prominent church of that quiet town. In a similar manner the beginning of Catholic worship in Braddock at St. Thomas' Church, dates back to the missions established from St. Paul's Cathedral. As the phenomenal rise of these and other communities is connected with the immigration of other foreign elements into this section of the state, the churches situated there will be described later.

One nationality was prominent during the first forty years of the diocese, the German speaking element of the church. Not less than eleven large Catholic churches, using the German language, were built in Pittsburg and surroundings from 1840-1880.

Of these the first place, in honor as well as in rank, belongs to St. Philomena's, Fourteenth street and Liberty avenue. This church was built in 1842, 1843 and 1844, the members performing manual labor themselves, as most of them were too poor to hire laborers. It was erected under the direction of the Redemptorist Fathers, who since then have had charge of the congregation. Two of the pastors have left an indelible mark in this church by their saintly lives: Venerable John N. Neumann, fourth bishop of Philadelphia (1852-1860), and Reverend Seelos, who died in the South while ministering to a plague-stricken congregation. From St. Philomena's almost all the German congregations of Pittsburg and surroundings were taken. In 1857 Holy Trinity Parish, on Centre avenue, was organized and is now under the direction of the Carmelite Fathers. In the fall of the same year St. Peter and St. Paul's, in East Liberty, began to have its own services, and in the spring of 1860 St. Augustine's Church, since 1874 entrusted to priests of the Capuchin Order, which was then suppressed in Prussia, was founded. This latter contains especially artistic wood-work executed by a brother of the Community. in 1868 St. Joseph's congregation, in Bloomfield, was cut off from St. Augustine's, and, like the others, has increased very rapidly. From St. Philomena's, St. Mary's, Pine Creek, St. Peter's, McKeesport and St. Mary's, Sharpsburg, were begun, but two others, both dedicated in 1848, became veritable mothers of churches: St. Michael's, in the South Side, and St. Mary's, Allegheny. The former can look back upon a life of great activity; formerly in a large field, then gradually reduced by the newly founded congregations, but losing none of its membership, which increased near its venerable church walls, and

today St. Michael's, after St. Mary's, at McKees Rocks, St. Martin's, at West-End, St. Joseph's, at Mt. Oliver, St. Peter's and St. Gregory's, in the South-Side, were taken from it, still it has about 4,000 members, its parochial school is attended by over 900 children, and the congregation supports its own orphan asylum, as well as many other similar institutions. At present the Passionist Fathers have charge of this model parish. As this church beyond the Monongahela multiplied, so also St. Mary's Church of Allegheny, the sister congregation of St. Michael's, increased. Its first pastor, Rev. John Stibiel, labored for almost twenty years with such success among the Germans of that section that his work is still fresh in the memory of the older members. As he was also master of the Bohemian language, he became the spiritual guide of the Czechs who began then to settle in this vicinity. He died in 1869. In the following year the Benedictine Fathers of St. Vincent Archabbey took charge of this flourishing congregation, which is perhaps now second in size among the German people. From 1877-1892 the present Right Rev. Leander Schnerr, O. S. B., archabbot of St. Vincent, was its pastor, and many improvements were made during his administration. It numbers about 3,000 members. In 1866 from this parish started St. Joseph's, which in turn has grown to such an extent that St. Leo's, Woods Run, was taken from it. Another church, Holy Name, Troy Hill, was cut off in the same year, another for the Bohemians, St. Wenceslaus, in 1871, St. Boniface, Royal street, in 1884, St. Ambrose in 1894, all of which have grown very considerably.

Of the other churches, one has caused particular interest: the place of worship for the Catholic Negroes. Soon after his consecration, Bishop O'Connor took measures for the spiritual welfare of this then much neglected race. In June, 1844, he appointed the Rev. R. P. Wilson, D. D., president of St. Michael's Seminary, to minister to them in a special manner. A chapel was opened on the corner of Diamond and Smithfield streets and the zeal of this pastor attracted many to his services. But the imprudent words of a clergyman of a different creed suddenly broke up the newly formed congregation. Father Wilson, namely, was accused from the pulpit of this preacher of being a pro-slavery man, who intended to entice the colored people and to bring them back to Southern slavery. Unreasonable as these statements were, they misled many of these simple-minded people, who consequently left the church, and the few who remained were in future looked after in a general way. This state of affairs continued till after the Civil war. In 1867 Bishop Domenec, the successor of the Right Rev. O'Connor, appointed the Rev. James Treacy, pastor of St. Bridget's, in whose district many negroes lived, to build a church for them. Upon his request St. Joseph's Chapel, on Arthur street, was erected, but had to be closed in 1873 on account of not receiving the necessary support. Later on a new, the present Church of St. Benedict the Moor, Overhill street, was built and has now its resident pastor.

The foundation for all this expansion of the church was laid by Bishop O'Connor and his able successor, Bishop Domenec, who was, previously to his elevation, pastor of St. Vincent de Paul's Church, Germantown, Pennsylvania. A Spaniard by birth, he emigrated to the United States during the persecution of religious orders by the Carlist party and showed remarkable administrative talents. His consecration took place on the 9th of December, 1860. The most remarkable event during his administration and largely due to his efforts, was the division of the diocese. In 1876 the fourteen counties of Central, West and Southwestern Pennsylvania were separated into the two dioceses of Pittsburg and Allegheny, the former comprising six, the latter eight counties. Bishop Domenec was transferred to the new see, making St. Peter's, Allegheny, his pro-cathedral, and the Rev. John Tuigg, pastor of St. John's, Altoona, received his consecration as Bishop of Pittsburg, March 19, 1876. In the following year various difficulties concerning the new division urged Bishop Domenec to visit Rome, where he resigned his see, whose administration as a separate diocese was entrusted to the Bishop of Pittsburg. Bishop Domenec had already been selected to go on an extraordinary mission of the church to the United States, when he died at Tarragona, Spain, January 7, 1878. Bishop Tuigg, whose health had not been good for some time, was stricken with apoplexy in the spring of 1883. After it became certain that he could not recover, he asked the Rome authorities for a coadjutor, with the right of succession. Pope Leo XIII appointed the Rev. Richard Phelan, pastor of St. Peter's, Allegheny, and his consecration took place August 2, 1885. Four years afterwards, in April, 1889, the two sees were again united and at the death of the Right Rev. Tuigg, December 7, 1889, Bishop Phelan began to govern the diocese as if no division had ever taken place. His administration met with great success, as he was a man of prudent zeal and extraordinary business tact. By such means people of many nationalities, who had lately come to this locality, were formed into regular congregations and the church work already on hand kept pace with the growth of the city. Thus, in 1901, the Eastern portion of the diocese waxed strong enough to be erected into a separate See, Altoona, whilst the Western portion became dotted with many parishes. But Pittsburg outstripped all other places in this territory and now has congregations that represent almost all the nations of Europe. The most prominent of these latter arrivals in Pittsburg are the Poles. St. Stanislaus', their first church, started in 1875 and is now a very flourishing parish. The Immaculate Heart of Mary, however, their second church in the city, surpasses it as regards importance and extent. It has over 800 children attending its parochial school. St. Adalbert's, South Side, rivals with these two parishes and several smaller ones are in the city, as well as in the surrounding suburbs. There are also three churches for the Italians within the present city limits: Help of Christians, Immaculate Conception, St. Peter's, which have been built within the last decade. Besides these, the Slavs, the Lithuanians,

the Croatians, the Krainers, the Magyars, as well as the Catholics of the Greek Rite, have each several places of worship within Greater Pittsburg.

In 1902, when the supervision of all these overtaxed Bishop Phelan's strength, he asked the clergy of the diocese and the bishops of the province to vote for a coadjutor, who should also have the right to succeed him. Their first choice was the Rev. Regis Canevin, pastor of the Cathedral. Rome approved of this selection and he was consequently consecrated February 24, 1903. This solemn act took place in St. Paul's, to whose congregation the new bishop had ministered so faithfully for a number of years. Yet another incident made this event memorable—it was the last grand act within those historic walls. When Bishop Phelan, beloved by his spiritual children and honored by the general public, passed away December 20, 1904, Bishop Canevin at once assumed full charge of the great work. He is the present incumbent of the bishopric and was born in Westmoreland county, Pennsylvania, and educated at St. Vincent College. Soon after his ordination he became a leading factor in the religious work of the church and his zeal has already been crowned with success. To his special efforts is due the building of the present St. Paul's Cathedral, which, at the cost of over one million dollars, was free of debt at the day of its consecration.

RT. REV. BONIFACE WIMMER, O. S. B.

The Catholic Church has from its beginning not been without the aid of religious orders: men and women, who consecrate their lives to the church and work for the spiritual as well as the temporal welfare of their fellow men. Such orders were called into the diocese of Pittsburg as its needs required or admitted by its zealous bishops, and in some respects the city received their exclusive services. When Bishop O'Connor first came to Pittsburg in 1841 he found only two such orders here: the Redemptorist Fathers and the Sisters of Charity; now, however, eight different orders of men and twelve sisterhoods assist the diocesan clergy of the city in its work.

In 1846 Bishop O'Connor welcomed the Benedictines Order to America, and especially to his diocese. Although their abbey, founded by the late Right Rev. Boniface Wimmer, was not located in the city itself, but in accordance with the ancient traditions of the order, away from the bustle of city life, yet it brought great help to the pastors, who were often assisted from the mon-

astery St. Vincent, near Latrobe. There, also, many of the Catholic citizens received their higher education, and for a number the diocesan seminary is located there. Since 1867 a number of Benedictines are permanently stationed in the city. First they ministered to the congregation of the Holy Trinity Church, later they had charge of St. Stanislaus' and St. Wenceslaus' for some time, and from September, 1870, to the present day the district of St. Mary's and St. Boniface's, Allegheny, is under their care. The Passionists, an Italian Order, came here in 1852, and, like the ones already mentioned, were also pioneers in America. From their first house, St. Paul's, on the South Side, the order has since spread into several states of the Union. St. Michael's Church, as well as Holy Cross Church, South Side, are now attended from their monasteries, and the Fathers assist in the different churches of the city when called upon. Italian Franciscans of the Immaculate Conception Province have charge of several congregations of their countrymen in the city and do missionary work among this class of immigrants, who arrived in great numbers during the last twenty years. Capuchin Fathers, who profess in general the same rule as the Franciscans, arrived in Pittsburg in 1874 from Prussia, where they had been expelled at that time with the other religious orders. They were entrusted with the administration of St. Augustine's Church, near which they built a monastery, and later a college at Herman, Butler county, where they educate students who desire to become members of the order.

In 1874 another religious order of men came into the diocese and into Pittsburg: The Fathers of the Congregation of the Holy Ghost. First a number of German parishes were given to them and in 1878 they began to open a Catholic day-college. This, in its infancy, was situated in rented rooms near the cathedral until 1882, when the order became strong enough to purchase ground and build the present splendid structure which graces the brow of Boyd's Hill, overlooking the Monongahela river. Since this was opened the number of students has greatly increased and the best possible facilities are granted them for a common, classical or scientific training. The college numbers now more than 300 students. Of the other religious orders of men, the Redemptorists have been mentioned in their work among the German population and the Carmelite Fathers with the history of Holy Trinity Church, to which they ministered since 1875. The Brothers of Mary, whose work consists in the teaching of grammar schools, have, since 1860, charge of the boys' department in St. Philomena's parish school, and since September, 1871, also at St. Mary's, Allegheny.

The first order of women which came to Pittsburg was the "Poor Clares," who founded a young woman's academy on the hill north of Allegheny, which is still known as Nunnery Hill. They withdrew in 1835 and were succeeded by the Sisters of Charity, who also took charge of the Orphan Asylum when it was first started in 1838. In 1845 these also left Pittsburg but returned thirty years afterwards to teach at the Sacred Heart Church, East End. They met with great success and at present conduct the Rosalia Foundling Asylum

and Maternity Hospital, as well as the Pittsburg Hospital, East End. The Sisters of Charity teach over 4,000 children in various parishes. The best known sisterhood in Pittsburg, however, are the Sisters of Mercy. Bishop O'Connor brought them in 1843 from Ireland, where the order had recently been founded, and they were the first of that name to cross the Atlantic ocean. Upon his advice they located in Pittsburg and have been of great value to the church in the United States in general and to Western Pennsylvania in particular. From here they have spread to almost every section of the country and helped the population in many ways by educational and charitable work. In the Civil war many of them left Pittsburg and opened and conducted hospitals in Washington City for the soldiers wounded in defence of the nation. They cared for them, watched over them and wooed them back to life without ever knowing or caring whether they were of their faith or not. At present there are more than 300 in the diocese of Pittsburg alone, and most of these instructing in schools or caring for the needy. In 1848 they began to teach the girls in the parochial school attached to St. Paul's Cathedral, and they have extended this work to such an extent that now over 4,000 pupils of the city are under their care. In 1845 the Sisters of Mercy took charge of St. Paul's Orphan Asylum, which had been chartered by the state on April 3, 1840. This institution changed its locality repeatedly till 1898, when the present structure at Idlewood, now harboring 900 children, was erected. Since 1841, when the first orphans were received, 12,994 have been enrolled in this institution. In 1847 the Mercy Hospital began under their management and has grown to be one of the largest and best equipped institutions of its kind in the state. Later they founded a working-girls' home, which is now attached to the Mother-house on Webster avenue. In Oakland they conduct a Young Ladies' Academy.

The Sisters of St. Francis have established two branches of their order in Pittsburg, the one and smaller teaching in the Italian schools, the other especially in German parishes, with at present nearly 4,000 pupils under their charge. These sisters came from Buffalo in November, 1865, to open St. Francis' German Hospital, which they still conduct with great success, having an average of 250 patients. They number now about 130 members of their order in the city. Next in importance for the common Catholic school education in the city were the Sisters of the Divine Providence, whose Motherhouse is in East End. They arrived in Pittsburg in 1876 from Mainz, Germany, and instruct at present about 1,500 children. The Benedictine Nuns were transferred from Carrolltown, Pennsylvania, to Allegheny, in 1879 and have since then general charge of the German parochial schools of that part. At present they instruct about 1,000 pupils. Other sisters for educational purposes in the city are the Ursuline Nuns, on Winnebiddle avenue, where they conduct a young ladies' academy. They came to Pittsburg from Havre, France, in 1870 The school sisters of Notre Dame were established in the city from Baltimore, Maryland, and at present have charge of the St. Philomena's school girls, Holy

Name School, and St. Joseph's German Orphan Asylum, Allegheny, with 300 inmates. The Sisters of the Holy Family and the Felician Sisters teach in the congregations of the Polish population.

Perhaps the most deserving of all charities of the Catholic Church of Pittsburg is that which cares for the aged. There is one such institution in each part of the city, and they exist not in name only but in the actual work their name implies. The one in Allegheny was opened in 1872 by the Little Sisters of the Poor, who came from Brooklyn, and a large building was afterwards erected for them by voluntary contributions from many sides. The house in Pittsburg is a branch of this institution and was begun in 1883. These two houses accommodate and at present care for 338 aged people of both sexes. There is yet a long list of similar institutions which were established within the last years: The Newsboys' Home was founded in the fall of 1888, to care for these poor waifs when off duty; the St. Joseph's Protectory and Industrial School for homeless boys began in 1893 in commemoration of the golden jubilee of the existence of the diocese and opened in 1895. Its purpose is to instill honesty and morality into the hearts of destitute boys of a riper age.

But one has met with particular success and appreciation from Catholics as well as non-Catholics, the Monastery of the Sisters of the Good Shepherd, Allegheny. The first nuns of this convent came to the city in 1872 from Ottawa, Canada, and opened a home for the training of young girls to virtue and for the conversion of fallen women. Their work on Troy Hill has preserved innocence in many girls who were exposed to extraordinary dangers and brought peace to many a home on both sides of the river.

It will be seen from this that for fifty years the Catholic Church succeeded but moderately in Pittsburg and that for the past seventy years its growth has been marvelous. It is more than holding its own in keeping pace with the growing population of Pittsburg and the surrounding cities. Its fine churches and its charitable and educational institutions place it in the foremost ranks of the religious bodies of the city. This has all been done at a great expenditure of money. The extensive enterprises of the citizens of Pittsburg brought thousands of laborers from foreign countries, who were poor and could not contribute or add material aid to the church work, yet they required places of worship and care and attention not only from the pastors but from all kinds of charitable institutions. Many years ago great debts had to be incurred to meet these demands, and during the panic epochs of 1873 and 1893-1896 some of these parishes had really hard times. But during the last years of prosperity almost all of the old debt has been paid off and what remains now is no longer a source of fear or anxiety to the church. Every year of this last decade added strength to the Catholic religion in Pittsburg.

In the district of the present Greater Pittsburg, comprising the two parts, Pittsburg and Allegheny, the increase of the church was the following during the nineteenth century:

1808	20	members
1816	320	members
1841	11,000	members
1880	75,000	members
1907	150,000	members

According to the official Catholic Directory there are within this same Greater Pittsburg at present:

Churches	72	Orphans	1,450
Chapels	41	Foundling Asylums	1
Priests	188	Inmates	125
Sisters	800	Industrial School	1
Parochial Schools	56	Inmates	40
Regular Attendance	22,254	Homes for Aged Poor	2
Catholic Population, 1907	150,000	Inmates	338
Colleges	1	Homes for Working Girls	2
Students	360	Inmates	110
Academies	2	Hospitals	4
Students	325	Inmates	653
Orphan Asylums	4		

The above includes Pittsburg and Allegheny only. If we include the boroughs of Pitcairn, Wilmerding, Turtle Creek, East Pittsburg, Wilkinsburg, McKeesport, Braddock, Duquesne, Homestead, Carrick, Castle Shannon, Crafton, Carnegie, McKees Rocks, Millville and Etna, all of which are contiguous to Pittsburg, the above statistics would be changed as follows:

Churches	117	Schools (Parochial)	80
Chapels	46	School Children	29,663
Priests	219	Catholic Population	220,000
Sisters	939		

CHAPTER XX.

Early Schools.

William Penn was a man of great foresight. He saw from the beginning of his work in America that the children of the province, which he founded, should be educated in order that they might become good citizens. He, therefore, ingrafted into the laws of the province the following provisions: "That all persons in this province and territories thereof having children, and all the guardians and trustees of orphans, shall cause such to be instructed in reading and writing, so that they may be able to read the scriptures and to write by the time they attained the age of twelve years; and that they then be taught some useful trade, that the poor may work to live, and the rich, if they become poor, may not want." He fixed a penalty of five pounds to be paid by any parent who would fail to follow the provisions of this law. The law remained in force for ten years and was then abrogated by William and Mary, conjointly sitting on the English throne. Still later Governor Fletcher had the same provisions enacted and this re-enactment was never repealed though it was generally disregarded. Compulsary education is, therefore, not new in Pennsylvania, though the enforcement of the law is scarcely a decade old. During all these years the state apparently acted on a theory directly the opposite of the one taken now, viz., that the preliminary education would in some way be obtained by the children and that it should loan its financial assistance to securing for the young men and women a higher training and education. It accordingly appropriated lands and money to assist colleges and universities in various parts of the state, but did practically nothing to assist the primary school until 1834.

It will be recalled that a census of Pittsburg was taken in 1761, and that the report showed forty-eight children. Among other inhabitants was one James Kenney, who kept a store and a diary, and who noted in his diary that the citizens had employed a school master at sixty pounds per year. It is likely that he taught the children, particularly the boys, until the town was destroyed by order of Captain Simon Ecuyer during Pontiac's conspiracy in 1763. There were more important matters to be attended to than to educate

the boys that year, but with the temporary peace of 1764 the school master might have resumed his duties, though there is no evidence that he did. At best education was but little thought of during those years. It was better that a boy should be taught to shoot unerringly than to speak correctly. The records of those days deal mainly with Indian outbreaks, wars, the prices of skins and furs, etc, for it was these matters that were uppermost in men's minds, and by them mainly they secured their livelihood. And this condition in Pittsburg was not changed materially till after the close of the Revolution. It is not doubted but that they had some manner of teaching the boys the rudiments of an English education, but the records being meager at best, were concerning the far more important matters, and silent entirely on the question of education. In 1783 we have notices of the Pittsburg Academy, which would indicate that there were schools of a lower grade. But Hugh Henry Brackenridge, in writing for the *Gazette* in 1786, states that "one or two schools are established to teach the first elements, but it is greatly desirable that there be such which can conduct to more advancement in science." Those who are familiar with his somewhat exaggerated descriptions, will be slow to conclude that he would understate the educational facilities of the town he was seeking to exploit. A few years later it was mainly through his efforts that the Pittsburg Academy, the first school of any note in Pittsburg, was established.

In the *Gazette* on November 10, 1786, there is the following, which is really the first record of an effort to educate the girls of Pittsburg:

A Boarding and Day School for Young Ladies will be opened on Widnesday the fifteenth instant, by Mrs. Pride, in the house where John Gibson formerly lived, behind his stone house, where there will be taught the following branches of needle work, namely, plane work, colored work, flowering, lace, both by the bobin and the needle, fringing, dresden, tabouring and embroidering. Also reading, English, and knitting if required. Mrs. Pride, from the long experience she has had as a teacher and the liberal encouragement she has met with hitherto, both in Britain and in Philadelphia, flatters herself that by the utmost attention in teaching the said branches, as also taking the strictest care to the morals and good breeding of the young ladies under her care, that upon trial she will also merit the approbation and encouragement of the inhabitants on this side of the Allegheny mountains.

From this it would appear that, notwithstanding the proverbial neglect of the education of young women of that age, they were first looked after in that direction in Pittsburg. More than a year after, January 5, 1788, Thomas Towsey advertised the opening of a school for boys in a house belonging to Mr. McNickel on Front street, where he would teach boys the Latin language, reading English grammatically, writing, arithmetic, etc." He also advertised "an evening school to be kept in the same house." These advertisements prompt us to think that there were schools in Pittsburg of which we have no note, for otherwise Mrs. Pride would scarcely have expected the kind of students she advertised for, and Thomas Towsey's Latin school would have

been extremely out of place. There were other advertisements equally inexplicable on any other theory than that they had schools of some importance which the chroniclers failed to mention. A man named Visiner, in 1798 in a note, thanks those who had employed him to teach French, and further advertises a reduction of tuition from ten to six dollars for pupils who came to his house for instruction, and eight dollars for those whom he must visit at their homes. On October 12 of the same year, a teacher named McDonald advertises the opening of an evening school for the benefit of those who are busy during the day. In this he proposed to teach arithmetic in its various applications to business or the sciences, bookkeeping, mensuration and geography, also writing in its several sizes and proportions and "the English language correctly and grammatically." In 1801 Rev. John Taylor, rector of the Episcopal Church, advertised for pupils, to whom he would teach writing, arithmetic and geometry, and says that any one who has made a "tolerable proficiency in mathematicks, if his curiosity prompts him, may in one quarter, learn the whole process of making an almenack."

Robert Steele, who afterwards became a Presbyterian preacher, opened a school in Pittsburg in January, 1803, at his house on Second street. He advertised to instruct the pupils in Latin, Greek, geometry, etc. He advertises many examinations, "considering them best calculated to bring into operation two powerful incentives to application, the love of praise and the dread of disgrace." He also requests the attendance of parents, guardians, etc., on these examinations. His rates were four dollars per quarter. In 1803, a teacher named Carr opened a school for both boys and girls. The next year he advertised that his school was moved to larger quarters over Dubac's store, where he probably taught till 1808, when he opened a boarding school for boys. In 1818 he removed his school to Third street where Mrs. Carr "instructed young ladies in a separate room in the usual branches, and in all kinds of needle work." William Jones began a school in 1804, and charged but two dollars per quarter for tuition. In February, 1808, Samuel Kingston opened a school in a stone house on Second street. He afterwards read law and became an able member of the Allegheny county bar. He was the only man who perished in the great fire of April 10, 1845. His advertisement reads as follows: "Samuel Kingston respectfully informs the inhabitants of Pittsburg that he will open a school on the sixth of April next, in a room of Mrs. Irwin's house, corner of Market street and the Diamond, where he will teach reading, writing, arithmetic, bookkeeping, English grammar, geography, mensuration, trigonometry and navigation on the most approved plans. Also he runs a night school." A teacher named Graham opened a school on Second street, using the room formerly occupied by Mr. Kingston, in which he proposed to give his pupils an English and classical education on moderate terms. The advertisement stated that Mrs. Graham would at the same time open a school for "young ladies" in an adjoining room, and that she would instruct them in all branches of an English education and in needle work. In 1811 Thomas

Hunt opened a school "for the instruction of females exclusively." The hours he advertised were from 8 to 12 a. m., and from 2 to 5 p. m. He did not advertise any instruction in needle work. His terms were three and four dollars per quarter according to the grade. In the same year this advertisement appears: "Messrs. Chute and Noyes' evening school commences the first of October next. They also propose on Sabbath morning, the 22 instant, to open a Sunday morning school to commence at the hour of eight a. m., and continue until ten. They propose to divide the males and females into separate departments. The design of the school is to instruct those who wish to attend, the Catechism and hear them read the Holy Scriptures. No pecuniary compensation is desired, a consciousness of doing good will be an ample reward." In 1812 John Brevost opened a French school, and with his wife and daughter opened a boarding school in connection with it in 1814. Their terms were, "for reading, writing, arithmetic, English grammar, history and geography, with the use of maps, globes, etc., $8.00 quarterly. Playing on the piano, $10.00 quarterly; vocal music, $5.00 quarterly. Drawing and painting of flowers, $6.00 quarterly. French language, $5.00 quarterly. Boarding, $37.00, payable in advance. Dancing, books, materials, drawing, sewing, bed and bedding to be paid for separately or furnished by parents." Mrs. Gazzam had opened a seminary for young ladies by this time, and advertised its removal to Fifth street. Her pupils were instructed in the elementary studies of an English education, and in needle work at four dollars per quarter. She taught them to cut, make and repair their clothes. The pupils were permitted to visit their homes once each week, but no young men were allowed to visit them unless attended by a servant. She boarded them for $125 per year. The two sisters, Miss Anna and Arabella Watts, instructed young ladies solely in needle work. In almost all schools needle work was a requisite part of the education of young women. In fact it was considered the all important part of woman's training, and not infrequently other branches were taught if required, or if "thought necessary."

For a period of seventy years after Pittsburg was laid out as a town, the educational facilities of the children were very limited, indeed were almost, if not entirely, confined to private schools or church schools. The accounts or records kept by these schools are very meagre; we must depend upon tradition or upon an occasional advertisement in an old newspaper for nearly all we know of them during all these years. The churches of Pittsburg were the first educators. Not infrequently did the minister "keep school" during the week and preach on the following Sunday. These schools were purely for the children of the communicants of the church, and were rarely if ever attended by others. There was a school law passed by the legislature in 1824, and it was practically the first school law in Pennsylvania. Briefly it provided for the election of school directors in each borough and township, and their prescribed duties foreshadowed in some degree the duties of our present directors. The people were opposed to this law because it seemed

to take from them and to give to the school directors powers which they were determined to hold and exercise themselves. The law did not of itself prove very beneficial to the cause of education, but it probably wrought its greatest good in paving the way for a later act known as the Free School Law. It was passed by the legislature in 1834, and questions arising from it brought about one of the severest contests ever known in any Pennsylvania law-making body. The act applied to all parts of the state alike, but by one of its provisions it was not to go into operation or effect in any city, borough or township until the electors of that municipality had approved it. Indignation meetings were held in all parts of the state, and the legislators who sustained the bill were denounced most heartily by the people and many of them were defeated for re-election, while others were returned only upon their pledging themselves to favor the repeal of the obnoxious measure relative to free schools at the following session of the legislature. The legislature then met each year, and at the session of 1835 petitions were presented signed by thousands of voters—it is said by one-eighth of all voters in the state—asking for the repeal of the measure. It is quite significant that many hundreds of these petitioners could not write their own names and signed them by making their cross mark. The defeat of the repealing act was due mainly to two men, namely: Thaddeus Stevens and George Wolfe, the latter being then governor of Pennsylvania.

The framers of the state constitution of 1790 were men of greater wisdom than the petitioners against the common schools in 1835, for the constitution provided, even in that early day, that the legislature should as soon as convenient, arrange for schools throughout the state in which "the poor should be educated gratis." The first bill establishing such a system was the one mentioned above, passed in 1834. The hostility to it came in a great measure from the wealthy tax payers, who could not see why they should be compelled to help educate any more than to help clothe their indigent or unfortunate neighbor's children. Their hostility to the free school system is almost incredible to the present generation. Stevens, who had been elected to the legislature before that by a large majority, was now severely censured by his constituents, but returned by a small majority. He also received special instruction to vote for the repeal of the free school bill, but he did not pledge himself to obey their instructions. When the repealing bill came up for passage there were presented 558 petitions signed by 31,988 names in favor of its repeal, while there were but 49 petitions signed by 2,575 names opposing its repeal. Instead of obeying his constituents to favor the repeal bill he became its chief opponent, and made in defense of the common school law what is supposed to have been the hardest fight and the most effective speech of his eventful life. He was then in the fullness of his strength. There was no cringing to the popular clamor in him. With the boldness of a lion he advocated what he thought was right regardless of the consequences. His brave appearance, daring courage, his noble voice and the directness of his style,

coupled with the glory of his cause, so moved his hearers that for once at least the legislature rose supreme to all selfish interests, and obeyed the instincts of a higher nature. Largely through his efforts the common school system was saved, and well may the boys and girls of our present free schools contribute pennies, as they are doing in some sections, to erect a monument to his memory. Years afterwards when the honors and the leadership of a nation were heaped upon him, Stevens spoke of this address as the "crowning utility of his life," and said "he should feel himself abundantly rewarded for his efforts in behalf of a universal education, if a single child educated by the common school system should drop a tear of gratitude on his grave."

When the free school law was passed Pittsburg was composed of four wards named respectively, North, South, East and West wards. The entire city had then a population in 1835 or 1836 of perhaps from thirty-three to thirty-five thousand. Shortly after the passage of the act all the four wards voted on and approved the measure, and immediately took the proper steps to reap the benefits of its provisions. Shortly before this the county of Allegheny had purchased a lot on Ferry street, and had put up a house on it in which a school was opened for the education of the children of the very poor of the city. The school board of the First Ward, known as the Duquesne Ward, for it included the place of the old fort, purchased the lot and building from the county in 1836, and at once opened a public school under the provision of the new school law. This building was the first school property owned by a school board in Pittsburg. The school was continued and held in the old building until 1850 when a new school building was erected between First and Second avenue, where it remained for many years.

The Second Ward was called the South Ward, and its school board opened its first public school on September 11, 1835. Not having a school house the board rented temporarily an old carpet factory on the corner of Smithfield and Water streets, and started the common school system in it. In 1838 the school was moved into another building that had formerly been a chair factory near Cherry alley and Third avenue. In 1841 the board of this ward built its first school building on the corner of Fourth evenue and Ross street. It remained there until 1850, when it was removed to a school building, a new one, on the corner of Ross and Diamond streets.

The Third Ward was called Grant Ward because it included Grant's Hill, and it erected its first public school building in 1836. It had purchased a lot on Cherry alley and Diamond street. In a building which they erected, school was held until 1852, when it was removed to a structure on the corner of Strawberry alley and Grant street. They claimed when it was built that it was the best public school building in the United States.

The Fourth Ward, the North, opened its first common school in 1835, in an old building on the corner of Duquesne way and Seventh street. They began shortly after to erect a new building and only occupied the old one until it was finished in 1838, whereupon they occupied it. The new building was on

Penn avenue and served well its purpose until it was burned in 1847. The board then purchased a lot on Penn avenue and Cecil alley, and erected a finer building which was completed and moved into in 1848. In 1836 a Fifth Ward was added to the city, it being afterwards divided and is now known as the Ninth and Tenth wards. School was opened in the Fifth Ward in 1837. They rented rooms which they occupied until 1842, when the board built two school buildings, one on Pike street, and another on Liberty street. They were used until 1861, when a much larger and better building on Penn avenue and Fifteenth street, near the Ralston school, was erected, and they occupied it is soon as it was completed.

The Sixth Ward was formed in 1846. The school board erected a building in 1848, and in 1851 erected a similar building on Second avenue. In 1858 it built a fine school building containing thirty school-rooms, and situated on Forbes and Stevenson streets.

The Seventh and Eighth wards were made in 1845, and opened their first school in 1847. The Eleventh Ward was formed in 1846, and a school building was built on Green and Fulton streets in 1848. This served them until 1868, when it was removed into a new building on Granville street. The Twelfth Ward was formed in 1846. Prior to this there had been a small school on the corner of Twenty-sixth and Smallman streets, but in 1848 a public school building was erected on the same corner, which served for school purposes until 1855. In 1870 there were two school districts formed from the ward, the one on the east being called Springfield sub-district. Schools were opened in a temporary building on Smallman street near thirteenth street, and were continued there until 1872, when the board had finished one of the finest buildings in the city.

In an old note book of People's township it is shown that the citizens of that section very early availed themselves of the benefits of the common school law of 1834. The voters were promptly called together and there was not a single vote recorded against coming under the law. John Grahan, Daniel Negley, John McClintock, James Flemming, William B. McIlvain and W. B. Fahnestock were at once elected school directors, but at that time other parts of the state were petitioning in favor of a repeal of the bill, and at a meeting of the board the following resolution was passed: "In cosequence of the great uncertainty in relation to the school laws, on account of the numerous petitions being sent in from the various parts of the state for its repeal, the board thinks it advisable to suspend their operations for the present and wait the action of the present assembly on the subject." This was the assembly of 1835 and 1836. Among those who are now gone, who worked valiantly for the establishment of the new system, were George F. Gilmore, Isaac Whittier, J. B. D. Meads and John Kelley, while still later came such workers as Philetus Dean, W. W. Dickson, Lucius Osgood, James Newell, Henry Williams, James M. Pryor, S. F. Coville, Andrew Burtt and D. C. Holmes. George F. Gilmore has the honor of opening the first public school

in Pittsburg in a rented building on Seventh street in 1835, though his enrollment shows only five pupils. In the first fifty years of the common schools of Pittsburg the number of teachers increased to over five hundred, the enrollment of pupils to over 25,000, and the school property from one rented building to about $2,000,000 worth of property. The statistics kept under the common school system from 1834 to 1854 are very meagre, but after 1854, when the act of assembly established the office of county superintendent, the minutes are kept much more completely. Beginning in 1856 we give in the following table the number of teachers and the amount paid the teachers, taking only every fifth year for a period of thirty years. This is sufficient to show the increase is not confined to recent years, but that it has been gradual since the earliest complete records of the new system.

Year.	Number of teachers.	Amount paid teachers.
1856	109	$ 39,394.75
1861	129	39,638.58
1866	131	64,441.88
1871	216	144,930.98
1876	428	268,276.59
1881	473	272,501.09
1886	557	324,363.29

Allegheny, formerly called Allegheny City to distinguish it from Allegheny county, had grown sufficiently to be incorporated into the borough by an act of assembly passed on April 14, 1828, when it had a population of perhaps 4,000, and twelve years afterwards it was incorporated into a city with a population of 10,090. Soon after it became a city it was divided into four wards. A school was supported on Robinson street, near Carry street, even before the passage of the school law in 1834. It was held in a rented room of a building which was neither painted nor plastered. The first teacher was Thomas McConnell, and the second was William Carson. In 1835 and 1836 a building known as the Presbyterian Academy on South Common, near Marion avenue, was rented by the new school board, and all the schools of the borough were held in it until 1840. The early teachers were John Kelley, a man named Campbell and others. In 1840 the First and Fourth wards united in maintaining a school, even then called a high school, in the basement of the Methodist Episcopal Church, also on the South Common, and John Kelley was employed as teacher. This school was kept up until 1844, when the directors of the First Ward purchased a lot on the corner of School and Rebecca streets, and put up a two-story brick building which contained four rooms. In January, 1845, all the schools in the academy were removed into the new building. Kelley was the principal, or rather the oldest teacher, and there were two teachers besides him. The pupils increased so that in 1849 a third story was added to the building, which gave two additional rooms making six in all. In 1853 an adjoining lot was purchased for

$1,500, preparatory to erecting an addition. The same year two rooms were rented in the western part of the city for $3.00 per month, and two schools were established there. Miss Reed and Miss May were employed as teachers in the rented rooms. In 1856 a building of six rooms was added to the old school building, the new addition being on the adjoining lot purchased. The addition cost $4,900. The two schools in the rented rooms were at once moved into the new building on Rebecca street. This building was used as a school building until 1874, when it was razed to the ground and a much better one erected in its place. In 1856 a system of grading schools was introduced, which did not differ materially from the present system. Prior to that each teacher was independent of any authority save the school board.

The Second Ward of Allegheny organized its public schools in 1840 by securing a two-story building on North Allegheny and Webster streets. The building contained two rooms and served them about three years, when they removed to another building on the corner of Barnett alley and Arch street, and there they remained until 1846. That year they completed a two-story building on North avenue, and began their schools in it in August. This building had four rooms, and was afterwards improved and another story added to it. It was damaged greatly by a storm in 1859, after which it was rebuilt in much better style. The Second Ward also maintained two other schools, one on Taggart street, known as Pleasant Valley School, and another on Observatory Hill. A two-story frame school was erected on Taggart street in Manchester, then a suburb of Allegheny, in 1866. In 1867 the borough of Manchester was taken into the city and the school became one of the Second Ward schools. The school on Observatory Hill was formerly a McClure township school. A one-story brick house was rented for it in 1867. In 1870 this territory was also taken into the city and became part of the Second Ward. The Irwin avenue school house was built in 1874 on a lot which the borough had purchased a year previous. A wing of seven rooms was added some years later. In 1877 another good sized school building was erected on Observatory Hill.

The Third Ward of the city erected its present school building on the corner of North and Cedar avenues in 1839. It contained but two rooms, but was a substantial brick building. Two years later another school building was erected on the corner of East and Third streets, but it was a frame building with but two rooms in it. During the Washingtonian Temperance Revival early in 1840, the society erected a building near the Diamond, which was known as the "Ark." This building, when no longer needed by the society which built it, was rented by the school board and converted into school houses for advanced boys from all the schools of the city. In 1850 a school building was put up on the corner of North avenue and Esplanade street. It contained eleven rooms, but in a short time was added to until it contained twenty-three rooms, and was the largest school house in the city. In 1870 a lot was purchased on Chestnut street, and in 1871 a superb three-

story brick building was put up containing twelve rooms with many modern conveniences. The cost of the lot and the entire structure was $75,000.00. Prior to 1840 there were three schools in the Fourth Ward. Two of them occupied rooms in the basement of Dr. Sproul's Church, which stood on the corner of Leacock and Sandusky streets, while the other was on Avery street. There was also a joint ward school for colored pupils in the basement of the Baptist Church, and the joint high school before referred to was held there. Another was added in 1841, and in 1844 the school system of the city was re-organized. The result was that the joint high school was abandoned and its rooms given to the lower schools which had increased to seven. The new locations in 1844 were two in the basement of the South Common Methodist Episcopal Church, two in Dr. Rodger's Church, two on Canal street, near the Allegheny end of the aqueduct, and one on Avery street, and thus located they remained until 1848. In 1847 a lot on Sandusky street, seventy by one hundred and ten feet, was purchased for $3,500, and the following year a school house costing $5,400 was erected on it. This house contained fourteen rooms, and served its purpose well until 1871, when the schools were removed to the large building on Liberty street.

The school building for the Fourth Ward was for a number of years on Canal street near the acqueduct, and was first used in 1858. It remained there until 1868, when the new building on Liberty street was finished and the school was moved into it. The Liberty street building, including grounds, etc., cost about $56,000.

The Fifth and Sixth wards are closely associated in their school work, but not otherwise. When Manchester came into the city by act of assembly in 1867, an ordinance was passed by the city councils on May 9 following, which provided that the parts of the First and Second wards west of Allegheny avenue should be added to the new district, and the whole to be divided into the Fifth and Sixth wards. There were about 550 school children in the Fifth Ward and they had but one school house, a two-story brick building on the corner of Chartiers and Fay streets, which could in no way be partitioned into more than four rooms. Almost at once a lot on the corner of Fulton and Page streets was purchased, and by September, 1869, a splendid school building for that day was ready for use. The building was scarcely occupied, however, until a fire came and destroyed it so badly that the school had to be removed to rented rooms in various parts of the city until the next September, when they were again united in the repaired building. The population of the ward increased so rapidly that a new twelve-roomed house soon became necessary. Two of the best school buildings in Pennsylvania were erected there in 1857.

The Sixth Ward of Allegheny was a part of Ross township when the common school law was passed in 1834, and as its population increased it became part of Manchester. There was in 1834 a school taught by a teacher named Neville near Strawberry alley and Beaver avenue. Robert M. Park

and others succeeded in building a small frame school house on Chartier and Fayette streets, and in it a private school was maintained for some years before the school system of 1834 was adopted. It is claimed that in this building the first public school under the new law was opened. The new law was so violently opposed in this district that no one could be induced to serve on the school board save Mr. Park. He took legal advice and as a result constituted himself the school board for the year. He levied a school tax, appointed tax collectors, etc. Almost alone he established the new system and pushed it to a grand success. Then the people began to come over to him, and in a short time the system had scarcely an enemy in the district. In 1836 a new school house was erected on Chartiers street near Locust street. It was a one-roomed brick building. 1849 the board began to erect a new school house in place of the old frame structure. In 1859 the Sixth Ward built a school house known afterwards as the Sixth Ward school. It had twelve rooms in it, and was one of the finest in the city. It was sufficient for its purpose until 1870, when a new fifteen-roomed building was erected close to it costing $42,700. In 1886 a frame annex of six rooms was added.

The Seventh Ward was formerly a part of Reserve township, and had schools organized in 1836. The district embraced Duquesne borough, New Troy, Spring Garden, Woodville and McClure township. Troy Hill, Woodville and Spring Garden were taken into Allegheny in 1868 and became a part of Seventh Ward, and remained in it until 1877, when Woodville became the Twelfth and Troy Hill the Thirteenth wards. A school building was put up in Spring Garden district in 1857 on a lot on Angle and Humbolt streets. It was a one-story brick house of two rooms. Another story of two rooms was added in 1861. A frame building of one story and two rooms was erected on the same lot in 1868. In 1874 an adjoining lot was purchased and an ordinary but solid structure on it was fitted up for school purposes. In 1880 all the schools of Spring Garden were united in a new and splendid brick building of twelve rooms. Duquesne borough was incorporated from a part of Troy Hill in 1849, and in 1868 was taken into Allegheny and became the Eighth Ward. In 1847 or 1848 a two-story brick building was erected on River avenue near Herrs Island. The school board paid a small part of the cost of this structure, but most of it was paid by public subscription, with the understanding that it should be used as a church as well as a school house. In 1869 a room was added to it, and four schools were then accommodated in it. In 1873 another woman teacher was added, and in 1883 the Eighth Ward school with six teachers moved into a new building which had been erected on East Ohio street. James Shipman was the leading school man of his day in the Ninth Ward. A select school was started there in 1856, when it was yet a part of Ross township. In 1858 it was annexed to McClure township, and the old select school became a public school. In 1859 the board of directors purchased a half acre on William and Hanover streets

for $800, on which they put up a two-story frame building costing $1,600, and in 1861 another room was added to it. The board erected a brick building on the same lot in 1867, which, though it cost $6,000, contained only three rooms. In 1870 part of McClure township was taken into Allegheny and became the Ninth Ward. This increased the demand for school rooms, and in 1873 a three-story brick building was added to the old school house, making a total of twelve rooms and a hall.

The Tenth Ward was a part of Ross township up until 1873, when it was taken into the city and a new school house was erected at once. The Eleventh Ward was originally a part of Ross township and was afterwards

SHAKESPEARE SCHOOL

An ideal school building occupying an entire block on Shakespeare Street, East End. It was completed in 1892 and is supplied with every modern convenience to insure the comfort and protect the health of the scholars.

a part of McClure township. It had a school house perhaps as early as 1845 on Black Lane. This school was afterwards moved to Strawberry Lane, where it remained until 1869. The board then purchased a site on Woodland avenue for $1,300, and put up a two-roomed brick building. Three years later another room in the same building was arranged for. In 1873 this territory became the Eleventh Ward of Allegheny, and in 1874 a large school house was erected on Shady Lane. In the lower end of the ward was organized a school called Davisville School about the same time. A large lot was purchased north of Brighton road and west of Woods Run. In 1858 a second story was added to the school house, and other additions were added later.

The Twelfth Ward school like others in Reserve township was organized in 1836. In 1857 a one-story brick building of two rooms was erected and the Woodsville school was organized in it. In 1874 the building was unchanged, when that section of the city became the Twelfth Ward. The Thirteenth

Ward school was organized from New Troy and Troy Hill in 1836, and began in a one-roomed house. It remained there until 1860, when the building was sold and a new site purchased on Clarke street, where a two-roomed school house was erected. In 1874 the building was unchanged, and in 1885 four rooms were added by tearing down the old school house and erecting a two-story eight-roomed building. In 1837 a school for the education of colored children was organized in the basement of the Baptist Church on Robinson street. A second school room for these children became necessary shortly afterwards. They were removed to the building on Sherman avenue and Ohio streets in the rear of Dr. Swift's Church. In 1846 they were removed to Avery street, and from there to Temple Arl where they were kept for seven years. They were then moved to the Universalist Chapel in the Second Ward in 1859, which was located on Middle alley. They were finally located on Sherman avenue, where a four-roomed frame building was put up for them. In 1880 the colored pupils were distributed among the ward schools of the city and high school departments which had been founded in each ward before the passage of the free school law in 1834. In 1833 all were united in one central high school. It was held in a frame building on Sherman evenue, which had been used for the colored school. It was refitted for a high school in 1833. Other grounds around it were subsequently purchased, the old building was removed and a splendid high school erected at a cost of $120,000.

Below we give some statistics of the cities of Pittsburg and Allegheny, which show that in the two cities, soon to be united, there were 1,690 public school teachers employed in 1906, and there were 65,562 pupils in attendance, and this does not include parochial schools which in the two cities have 56 schools with an attendance of 22,254 pupils. There are in these two cities 115 school buildings, which are valued at $9.300,000.

A comparison of the following figures will show much concerning the development of the public schools in Pittsburg in the last decade:

Districts	Pupils 1897	Pupils 1907	Teachers 1897	Teachers 1907	Districts	Pupils 1897	Pupils 1907	Teachers 1897	Teachers 1907
Allen	916	1111	23	28	Humboldt	1140	717	26	20
Bedford	503	471	13	13	Knox	501	438	12	12
Beltzhoover ...	....	714	..	18	Lawrence	590	455	14	12
Birmingham ..	612	415	15	14	Liberty	1845	2213	45	57
Brushton	569	1295	13	33	Lincoln	1691	2266	38	54
Colfax	333	591	10	17	Luckey	854	905	22	23
Duquesne	180	143	5	5	Minersville ...	1797	2469	42	61
Forbes	1197	1126	29	29	Monongahela ..	254	237	6	7
Franklin	1028	1423	24	35	Moorhead	1366	1686	31	42
Grant	763	655	17	18	Morse	803	782	19	20
Hancock	428	494	10	12	Mt. Albion....	1338	1690	31	14
Highland	1931	2614	47	66	Mt. Washington	1464	1226	35	41
High Schools	1437	2063	52	75	North	199	262	6	7
Homewood ...	863	1619	21	39	Oakland	2380	2210	57	57
Howard	1458	1693	36	43	O'Hara	462	516	11	13

Districts	Pupils 1897	Pupils 1907	Teachers 1897	Teachers 1907	Districts	Pupils 1897	Pupils 1907	Teachers 1897	Teachers 1907
Peebles	1710	2356	39	64	Westlake	....	490	..	13
Practice School	196	199	11	11	Wickersham ..	542	395	14	12
Ralston	338	337	9	9	Crescent	....	173	..	6
Riverside	189	162	4	5	Esplin	....	350	..	10
South	415	371	10	10	Kindergartens .	617	1984	28	75
Springfield	368	340	8	9	Supervisors and special teachers	....	....	..	15
Sterrett	403	658	10	18					
St. Clair.....	995	884	24	25					
Stevens	509	457	12	13					
Washington ..	1607	1453	41	39	Totals 36832		45538	918	1239

The total enrollment in 1905 was 44,546, and number of teachers was 1,197.

The following table shows the same line of statistics from the superintendent's annual report for Allegheny City, for the years 1897 and 1906:

Districts	Pupils 1906	Pupils 1896	Teachers 1906	Teachers 1896	Districts	Pupils 1906	Pupils 1896	Teachers 1906	Teachers 1896
High School...	826	572	27	16	Eighth	324	431	9	7
First	651	775	15	13	Ninth	810	877	15	13
2d No. 1.....	1093	1172	23	4	10th No. 1 and 2	1250	614	24	15
2d No. 2.....	1269	1567	30	22	10th No. 3 and 4	....	611	..	10
2d No. 3.....	614	606	12	37	10th No. 5....	....	164	..	3
3d No. 1.....	1593	1490	35	25	11th No. 1....	901	573	22	11
3d No. 2.....	615	1019	14	17	11th No. 2....	764	455	19	8
4th No. 1.....	468	742	13	12	12th No. 1....	702	681	18	11
4th No. 2.....	468	618	13	11	12th No. 2....	313	332	10	6
Fifth	1538	1786	35	32	Thirteenth	887	738	18	13
Sixth	1966	2030	42	338	Fourteenth ...	311	132	10	2
7th No. 1.....	1069	984	15	18	Fifteenth	988	....	23	..
7th No. 2.....	384	....	12	..	Truant School.	256	....	7	..
					Total 20024		18969	451	327

CHAPTER XXI.

Theological Seminaries, Colleges, Seminaries, Etc.

In the early history of the churches of Western Pennsylvania, as the reader has seen, the young men who desired to prepare themselves for the ministry were almost entirely trained by older pastors. There were then but few theological schools even in the East, and none in Pennsylvania. In 1810 the general assembly of the Presbyterian Church provided for its first seminary of this kind, and two years later actually founded it at Princeton, New Jersey. It was well patronized for its day, so well indeed that in 1825 the assembly adopted a resolution which set forth that "It is expedient forthwith to establish a Theological Seminary in the West." This institution they resolved was to be known as the Western Theological Seminary of the Presbyterian Church in the United States. The assembly also appointed a commission to report a year hence, including in their report a plan for the proposed seminary, and they were asked to recommend a suitable location for it. This committee selected five commissioners, who were to examine all proposed locations and report to the committee. Offers of grounds upon which to locate the Seminary were made from twelve places, nine from Ohio, two from Pennsylvania, and one from Indiana. Each site held out inducements to secure the location. Allegheny, the leading one from Pennsylvania, offered $21,000 to be paid in installments and eighteen acres of ground in the "Common" of the city, which was then worth perhaps one thousand dollars per acre. This was regarded as the best offer made and as a result the seminary was located in Allegheny by the assembly which met in 1827. The assembly also appointed a board of directors, twenty-six in number, and adopted a plan which differed materially from that of the Princeton Seminary. The object of the special teaching designed to be done by this seminary may be best stated by a clause in the plan adopted, which sets forth "that learning without religion in ministers of the gospel will prove injurious to the church; and religion without learning will leave the ministry exposed to the impositions of designing men and insufficient in a high degree for the great purposes of the gospel ministry." To erect the buildings was a difficult matter in those

days, and they were not ready for the seminary until the spring of 1831, though the foundation had been laid in 1829. The building was erected on what is now known as Monument Hill, and from it there was a beautiful outlook over the valley of the three rivers and over the two cities built upon their banks. While the building was being put up and even for two years before it was begun, the seminary was practically in operation, the recitations being held in one of the rooms of the First Presbyterian Church, for the seminary opened with four students on November 16, 1827. This was kept up for three and one-half years, so that when the building was finally completed they had about forty students who were entered at once. The seminary did well and in it many young men were educated, for the journey to the few eastern seminaries was a difficult matter in those days. On January 23, 1854, the seminary building was entirely destroyed by fire. The building had sleeping rooms in it, and most of the students had found lodging in them. The fire came so suddenly that many of them had not time to save their clothing or books, and the seminary library was partly destroyed. The work of the seminary was carried on in the lecture rooms and Sunday-school room of the First Presbyterian Church of Allegheny. The Second Presbyterian Church of Pittsburg also offered its rooms but those of the other being nearest were accepted and were used until a new building could be put up. When the old seminary was destroyed a movement was at once set on foot which resulted in a change of location. The position on the hill had been inconvenient in many ways, and an exchange was made with the city authorities for a better location as was then thought at the foot of the hill, the new location fronting on Ridge avenue. There a new building was erected which cost about twenty-two thousand dollars, and has since been known as Seminary Hall. This building was completed and dedicated in January, 1856, two years after the other had been destroyed by fire. There were also erected near it, but within the grounds, four houses to be used as residences for the professors of the seminary, each of these houses costing about five thousand dollars. In 1859 a new hall known as Beatty Hall, and sometimes called Memorial Hall, was erected. This was built by money given by Mrs. Hetty E. Beatty, of Steubenville, Ohio. Her donation was ten thousand dollars, and the hall was erected on the north side of Ridge avenue. It was a four-story structure, and was used entirely for students' dormitories. It was remodeled in 1868. A library building has since been put up which cost twenty-five thousand dollars, and stands on a lot adjoining Memorial Hall. A residence nearby was also purchased as an additional house in which members of the faculty could live. In the winter of 1887-88 the seminary hall again took fire, and while it was not entirely consumed, the damage was very serious, and required a reconstruction of many parts of its interior. In making these repairs changes were made, and these added both to the beauty and utility of the structure. Since then other improvements costing perhaps twenty-five thousand dollars have been added to the building. Their property now consists of several large

halls, a library building and residences. The entire value of the property of the seminary is not less than a million dollars. The library is very complete in the line of work laid out for the students, and is of great value. The students have also the benefit of the many other libraries of the cities so that it is really one of the most attractive seats of education in theology in the United States.

THE ALLEGHENY THEOLOGICAL SEMINARY OF THE UNITED PRESBYTERIAN CHURCH OF NORTH AMERICA.

This institution was founded in 1825 by the Associate Reformed Synod of the West. Almost immediately after its organization in 1820, the Synod began to make provision for the education of young men for the ministry. After various preliminary measures, May 28, 1825, they resolved to do this, and Rev. Joseph Kerr, pastor of the St. Clair congregation, was unanimously chosen professor. He was thus sent to Pittsburg and in December, 1825, the seminary was opened with one instructor in charge of three students in attendance. A suitable library was purchased and a young men's fund established, the greatest contribution being from the professor himself, he generously giving the greater part of his salary. This fund became of much benefit in after years. Rev. Kerr died in November, 1829, and was followed two years later by Professor John Taylor Pressly, of South Carolina. In 1839 the church had grown to that extent that a division was made in seminary matters—one being established in Oxford, Ohio, in addition to the one in Allegheny. The Allegheny Seminary was incorporated by the Pennsylvania legislature in 1830 with a board of five trustees, but in 1868 a new charter was obtained providing for nine trustees. At first the seminary held sessions in the First (now Second) Church of Allegheny, and later in a room furnished by the First Church, Allegheny. In 1855, through a liberal bequest of Thomas Hanna, an elder in the First Associate Reformed Church, Allegheny, the site of the present buildings was purchased and a building erected, the location being at 616 North avenue, Allegheny. Hanna Hall was built from the proceeds of the same bequest largely in 1880. This contained twenty-five suites of rooms, each large enough for two students. The seminary is supported by proceeds of a partial endowment and annual contributions from the synods. In 1899 the present magnificent seminary building was completed on the site of the old one. It is one of the best equipped seminary buildings in all the land. It overlooks the beautiful North Side Park. It is four stories in height, contains Pressley Chapel, a library of 14,000 standard books, a reading room, parlors, gymnasium, and janitor's home. There are thirty-three single rooms; sixteen suites of double rooms; seventeen suites of three rooms, all well lighted and each floor has trunk rooms, baths, lavatories, etc. The building is heated by hot water. The library has an endowment of $15,000, given by James Law, of Shushan, New York, and is constantly being increased. Reverend James A. Grier, D. D., LL. D., is the present president of the

faculty. Since its establishment nearly nine hundred men have pursued their theological studies here. Over four hundred of the seven hundred living ministers of this denomination in America have received their instructions at Allegheny. The 1907, or eighty-second annual report, shows that there are 67 students, divided as follows: Senior class, 17; middle class, 23; junior class, 27. Of this number, 44 were from Pennsylvania, eight from Ohio and the remainder from numerous states, as far remote as California.

PENNSYLVANIA COLLEGE FOR WOMEN.

Several prominent members of the Shadyside Presbyterian Church met at the home of one of their number, Mr. David Aikin, in February, 1869, to devise means for the establishment of a female college. A committee consisting of Rev. W. T. Beatty and John A. Renshaw was appointed to formulate a plan of organization and make arrangements for founding the institution, now known as the Pennsylvania College for Women. The plan agreed on contemplated the establishment of a woman's college of a high grade, equal in its course of instruction to that of the higher colleges for men. It was stipulated that it should be a sectarian school, for the president and at least a majority of the board of managers were to be members in good standing in some branch of the Presbyterian Church. Subscriptions were first solicited from the Shadyside Presbyterian Church, and $30,000 were almost at once pledged for the advancement of the project.

In June following, the Ohio, the Allegheny City and the Monongahela Presbyteries adopted resolutions endorsing the institution, and they appointed a committee to act with the board of managers. In July a meeting was held in the Second Presbyterian Church in Pittsburg, to devise additional means for the institution. It was then thought that $100,000 would be necessary to put it on a solid footing, and committees were appointed to look after the various departments and to secure the additional means necessary for its establishment. Within three weeks $75,000 were secured. The largest contributor was Mr. James Laughlin, the iron producer. The institution thus set on foot was incorporated on December 11, 1869, by the Allegheny county court. A site on Fifth avenue, containing ten acres about three and a half miles from the Allegheny county court house, was purchased. It was indeed a commanding location, for its elevation overlooked the better parts of the city. Buildings of a high grade were erected at once. The school was opened for students on September 28, 1870, in a large mansion, which stood on and was purchased with the grounds. The school was conducted in the old buildings one year, and by the fall of 1871, they were able to open the school in the new buildings. The attendance was so promising that an extension was made to the new building at once. Joseph Dilworth bequeathed to this school $10,000 in 1885, and this sum was expended in the erection of Dilworth Hall, which included a chapel, laboratory, art room, class rooms, dormatories, etc. It was completed in 1888; a fine gymnasium was built in 1892, which in 1897 was

made to connect with a new music hall. While this institution was yet called the Pennsylvania Female College, the requirements for admittance were the same as of other eastern colleges. The present buildings consist of Barry Hall, four stories high, containing the living rooms of the faculty and resident students. On its lower floor is the library, drawing-rooms, class-rooms and offices. The Music Hall has a spacious modern gymnasium on its first floor, while on the second floor are the music studio and practice rooms. Dilworth Hall is devoted to the use of the preparatory school and also contains a labratory and art studio. In 1907 the faculty numbered twenty, and there were one hundred students in the various departments. Since 1900 the hitherto financially embarrassed condition of this college was relieved by raising $300,000 to pay off the mortgage against it, and to create an endowment fund, the credit of which should be given to Oliver McClintock, William Rea, Rev. J. K. McClurkin, D. D., and Mrs. Charles H. Spencer.

THE BISHOP BOWMAN INSTITUTE.

This was also a school for the higher education of young women. In 1862 Rev. Dr. Van Deusen was rector of St. Peter's Church in Pittsburg, and largely through his work and encouragement the school was founded. When it was established Bishop Samuel Bowman was assistant bishop of Pittsburg, and was highly esteemed in Western Pennsylvania because of his many virtues, and because of the special work he had done for his church in this section. The institution was therefore named in his honor. Rev. Anthony Ten Broeck, D. D., was elected as first rector of the school. It was first opened in a house known as the Murray residence on Second avenue near Smithfield street. It remained there under its first rector and met with a high degree of success for four years. In 1866 Dr. Ten Broeck was elected rector of Burlington College, New Jersey. At the same time Bishop Kerfoot was beginning his many duties as first bishop of Pittsburg, and one of them was to build up this institution of learning. His first work in this direction was to form a board of trustees, with himself at the head of the board, consisting of John H. Bailey, Thomas J. Breveton, Hill Burguin, Thomas H. Howe, William Metcalf, Ormsby Phillips, Abraham Garrison and John H. Schoenberger. The Bishop had the institution chartered and Rev. R. J. Coster, who had been in the educational work with Bishop Kerfoot at St. James College, Maryland, was chosen rector. The Murray residence was sold by the new board and converted into a hospital, and the school was removed to the residence of Andrew Fulton on Grant street near Fourth avenue. This building was only leased, but the school was conducted there and with many disadvantages until the spring of 1875, when the trustees saw their way clear to purchase a better building on Penn avenue and Fourth street. On April 1, the institution was moved into that building after which its success was more nearly assured. The course of study included the usual instructions in English, and in literature, modern languages, mathematics and music. This institution finally merged into other Episcopal schools and has not been in existence for many years.

PITTSBURG FEMALE COLLEGE.

This institution no longer exists in name in Pittsburg, but it was formerly an important institution, particularly in the Methodist Episcopal Church. It was chartered on February 10, 1854. Its organic laws provided that the stockholders of the institution should elect the trustees, a majority of whom should be members of the Methodist Episcopal Church. Bishop Simpson, who afterwards became eminent as an advocate of freedom, was then a resident of Pittsburg, and was the prime mover in founding the institution. It had also the earnest support of such men as Allen Kramer, Dr. H. D. Sellers, Alexander Bradley, Samuel Kier, F. D. Sellers, W. M. Wright, N. Holmes and many others. The buildings were large and well arranged. They were situated on Eighth street near Christ's Church. The school was opened on October 1, 1855, by Rev. S. L. Yourtee, and at first occupied the lecture room and other smaller rooms of Christ's Church. In 1857 Rev. L. D. Barrows, D. D., became president and served until 1860, when Rev. Dr. I. C. Pershing succeeded him and continued in office for twenty-six years. In 1886 Rev. A. H. Norcross, D. D., was elected president. In May, 1891, the buildings were partially burned, and the church concluded that it was not wise to rebuild them. Hence, after about two years in private houses, the school united with Beaver College at Beaver, Pennsylvania, and as such its influence is still felt in the education of young women of Western Pennsylvania.

CHAPTER XXII.

HISTORY OF THE WESTERN UNIVERSITY OF PENNSYLVANIA.

CHANCELLOR SAMUEL BLACK M'CORMICK.

The beginnings of any institution of learning are always full of interest, and in America are also full of the heroism of devotion and sacrifice. Perhaps no college in America, certainly none a century old, is without its story of hardship, of sacrifice and heroic faith. What is true of others is most emphatically true of the early days of the Western University of Pennsylvania. Conceived in faith, nurtured in self sacrifice, brought to maturity through a devotion to the finest ideals of higher education, it stands what it is to-day a monument to the love, the liberality, and the far-seeing faith of those who planned and worked for its development and growth. It is a most unfortunate circumstance that in the great fire of 1845 not only were the buildings burned, but all the records of the university from the very beginning were destroyed with them. This has made it exceedingly difficult to secure complete data, but through the untiring zeal of men who loved the college, and especially of Ex-Chancellor William Jacob Holland, much valuable information has been unearthed and put into permanent form. The files of the newspapers of the day have been examined, recollections of the descendants of the men prominent in its affairs have been gathered, the histories of prominent citizens, many of whom were also prominent in the affairs of the university, have been written, and all in all a great deal has been accomplished in the way of supplying the defects occasioned by the destruction of the early records.

Western Pennsylvania, in its efforts to lay the foundation of higher education, has a story to tell equally interesting with that of communities in New England. Scarcely had the armies of the Revolutionary war been mustered out to take their place as citizens, when the scattered inhabitants of this western land turned their thoughts to education. The first charter to an institution of learning west of the mountains granted by the legislature of Pennsylvania, February 28, 1787, created the Pittsburg Academy. The school was in existence earlier than this. Shortly thereafter the Academy at Washington and the Academy at Canonsburg were also chartered. The Academy at Meadville received its charter only a little later. All of these very shortly

afterwards became colleges. The people—ambitious and aspiring—believed that education was a fundamental necessity, and their aspirations found expression in the establishment of institutions which not only begot in the minds of the youth a desire for higher education, but which also made the greatest effort to supply the needs which were thus created.

The History of the Western University of Pennsylvania falls naturally into three periods:

I. The Academy—1787-1819.

Dr. Holland, whose sketch is the underlying basis of this brief history, quotes the first two sections of the act creating the Pittsburg Academy as follows:

"Section 1. Whereas, the education of youth ought to be a primary object with every government; and whereas, any school or college yet established is greatly distant from the country west of the Allegheny mountains; and whereas, the town of Pittsburg is most central to that settlement and accommodations for students can be conveniently obtained in that town: Therefore,

Section 2. Be it enacted and it is hereby enacted by the representatives of the freemen of the Commonwealth of Pennsylvania, in General Assembly met, and by the authority of the same, That there be erected, and hereby is erected and established in the town of Pittsburg, in the County of Westmoreland, in this State, an academy or school for the education of youth in useful arts, sciences, and literature, the style, name and title of which shall be 'The Pittsburg Academy.'"

The first incorporators of the academy were Rev. Samuel Barr, Rev. James Finley, Rev. James Power, Rev. John McMillan, Rev. Joseph Smith, Rev. Matthew Henderson, Gen. John Gibson, Col. Prestly Neville, William Butler, Stephen Bayard, James Ross, David Bradford, Robert Galbraith, George Thompson, George Wallace, Edward Cook, John More, William Todd, Alexander Fowler, Esq., Dr. Nathaniel Bedford, Ed. Thomas Parker. Its chief promotor was Honorable Hugh Henry Brackenridge, a graduate of Princeton in the class of 1771. In 1781, ten years after his graduation, during which he was master of an academy in Maryland, studied divinity and was appointed a chaplain in the Colonial Army, still later, admitted to the practice of the law in Philadelphia, he moved to Pittsburg, where he remained until in 1799 he was commissioned a justice of the supreme court of Pennsylvania, in which he continued until his death in 1816. Judge Brackenridge was not only a good judge and an able lawyer, but he was a man of fine literary ability—the author of "Modern Chivalry," "Law Miscellanies," and a number of other works of merit. He was a classmate of James Madison, the fourth president of the United States, Brackenridge and Madison being reckoned as the most brilliant as they became the most distinguished members of their class. The service he rendered in helping to lay the foundations of what afterwards became the Western University of Pennsylvania was most effective and valuable.

Rev. Samuel Barr, whose name heads the list of trustees, was a graduate of Glasgow University and became the founder and the pastor of the First Presbyterian Church, Pittsburg, which, among the multitude of Presbyterian churches in the region, still retains its primacy.

Rev. John McMillan, Rev. Joseph Smith, and Rev. Matthew Henderson, three of the other incorporators, are recognized as the men whose memory is also perpetuated in Washington and Jefferson College as founders of the academies at Washington and Canonsburg. Rev. James Finley was a younger brother of President Finley of Princeton.

James Ross, who was educated under Dr. McMillan, was admitted to the Allegheny county bar in 1788, and in time became the recognized leader of the bar. He was United States senator for nearly ten years, a man of large wealth and influence. His name is perpetuated in Ross street, Pittsburg, and Ross township, Allegheny county. He was one of the ablest men in the early history of the academy. These are illustrations of the eminent men who composed the first board of trustees of the first academy, except in Nashville, incorporated west of the Appalachian mountain ranges. It fulfilled the purpose of Judge Brackenridge, who aimed to select the most distinguished men of Western Pennsylvania as trustees.

The principals of the academy from the very beginning were men of high attainments, some of them attaining great distinction. George Welch, the first principal, took office April 13, 1789. Rev. Robert Steele, pastor of the First Presbyterian Church, Rev. John Taylor, Mr. Hopkins and James Mountain successively were at the head of the academy. From 1807 to 1810, Rev. Robert Patterson, of excellent fame, successfully carried on the work. He was succeeded in the latter year by Rev. Joseph Stockton, author of the "Western Calculator" and "Western Spelling Book," who continued in office until the re-incorporation of the academy as the Western University of Pennsylvania, in 1819. The institution flourished during the entire period and its very growth suggested that the curriculum of an academy was not wide enough to provide for the educational needs of the expanding community, and that a still higher institution of learning had become a necessity. In 1800 the population of Pittsburg was 1,565; in 1810 it had become a small city of 4,740; in 1820, four years after the frontier town became an incorporated city, the population had reached 7,248. It was strongly felt, therefore, that in a town of such importance, the largest of Western Pennsylvania, it was fitting that the curriculum of studies should be so enlarged as that the academy should become a college. This brings us to the second period in the history of the institution.

II. The College—from 1819-1892, under the present name, The Western University of Pennsylvania.

It was indeed a notable company of distinguished men who asked the legislature of Pennsylvania for the charter of the Western University of Pennsylvania, which was approved February 18, 1819. By this charter the trustees of the Pittsburg Academy were authorized and empowered to transfer

and convey all the property of the academy to the trustees of the Western University of Pennsylvania, which in this way became the successor of the academy, thus preserving the continuity of the institution from 1787 on. While the new institution was at the time a college and was intended to be such for a number of years to come, yet the name University was given to it because it was the confident expectation of the trustees that it would become a university in fact as in name, and would take the place in Western Pennsylvania which the University of Pennsylvania was taking in the eastern part of the state. It had already become obvious that Pittsburg was to be the center of a great region, and that the mountains so divided the state as to make it absolutely imperative that there should be two universities in order to supply the educational needs of the people. The charter itself is worthy of the eminent men who had a part in its framing. It is impossible even to read the names of these men without a thrill of genuine pride that Pittsburg, at the time only three years an incorporated city, should produce men of such remarkable eminence. Dr. Holland speaks of each of these in turn, and we can do no better than follow his leading.

James Ross, whose name appears first on the list of trustees, was one of the original incorporators of the academy in 1787, and mention of his eminent career was made in that connection.

George Stevenson was an eminent physician whose name was a household word in that period of Pittsburg's history.

Francis Herron was a man whose name will always be held in reverence in Pittsburg and in Western Pennsylvania. He was for fifty years the able and beloved pastor of the First Presbyterian Church of Pittsburg, whose costly building in the center of the business part of the city still attracts thousands of worshippers every Sabbath Day, marking it as the very center of the religious life of that denomination in Greater Pittsburg. Dr. Herron is remembered by many citizens of Pittsburg still, and the work he did both for Christianity and education will endure as long as Pittsburg itself.

Rev. Joseph Stockton, D. D., was at the time the principal of the academy, now merged into the university and, as already stated, was an eminent educator and author of text books.

Robert Bruce was the pastor of the First Associate, now the United Presbyterian Church, distinguished for his scholarship and a leader in his denomination. The nearness of that time to this is more clearly realized when we recall the fact that his son, David D. Bruce, an eminent member of the Allegheny county bar, died only early in the year 1907. Dr. Bruce himself is well remembered by a large number of people in Pittsburg.

Dr. John Black was pastor of the First Reformed Presbyterian Church, and like Dr. Bruce, a man of solid attainments and great learning. His descendants are still prominent in Pittsburg's affairs.

John Scull was the founder of the *Pittsburg Gazette*. The family has been prominent in Pittsburg and in Westmoreland county throughout the century.

John M. Snowden was one of the most prominent men in the western end of the state. He was the founder of the *Farmers' Register* in Greensburg in 1798, and after his removal to Pittsburg, in 1811, he published the *Commonwealth* and the *Recorder,* was city mayor often, county recorder, director of the Bank of Pittsburg, and from 1840 to 1845 served as associate judge of the county.

William Wilkins graduated at Dickinson College and was admitted to the bar at Carlisle before his removal to Pittsburg in 1818. He was great as a lawyer, a judge, a statesman and a citizen. He was president of the common council of Pittsburg; a representative in Harrisburg; was commissioned president judge of the judicial district including Allegheny county in 1820; was commissioned as judge of the United States district court for Western Pennsylvania in 1824; was elected to congress in 1828 but declined, accepting, however, the election to the United States senate in 1831; in 1834 he resigned from the United States senate to become minister to Russia; after his return from Russia he served successively as congressman, as secretary of war under President Tyler, and still later was a member of the senate of Pennsylvania. He was the first president of the Bank of Pittsburg. He died in 1865 in the eighty-sixth year of his age, but spent the closing years of his distinguished career in efforts in behalf of his country, and was able to rejoice before his death in the preservation of the Union.

George Evans, Morgan Neville, George Poe, Jr., and John Darrah, all of Pittsburg; John McFerren and John Gilmore of Butler county; Judge John Young, Dr. James Postlethwaite, and John Reed of Westmoreland county, and Robert Moore of Beaver county were men each one prominent, many of them eminent, and all of them leading citizens in their several localities. These deserve, if the records were at hand, as prominent mention as any of the others.

Henry Baldwin, LL. D., was a native of Connecticut, born in 1779, and a graduate of Yale in the class of 1797. He was admitted to the Allegheny county bar in 1801; elected to congress in 1816, and three times thereafter; was commissioned a justice of the supreme court of the United States in 1830, serving until his death in 1844. Yale College conferred upon him the degree of Doctor of Laws in 1830, and Jefferson College in 1843. He was a profound lawyer, a remarkably effective speaker, was a man of finest personal presence, and his legal opinions were distinguished for their clearness of statement and their depth of learning. Judge Baldwin was an ornament not only to Western Pennsylvania but to the nation.

Walter Forward was also a native of Connecticut, born in 1786. He was a student in the office of Henry Baldwin and was admitted to the Allegheny county bar in 1806. In 1822 he was elected to congress to succeed his former perceptor, and was re-elected in 1824. He was a member of the convention which framed our state constitution in 1838, and served as first controller of the United States treasury under President Harrison, and as secretary of the treasury under President Tyler. In 1849 he was appointed charge d' affaires

to Denmark by President Taylor and resigned to become president judge of the district court of Allegheny county, which office he filled until his death in 1852. He was a man of remarkable eloquence, a great statesman, a profound lawyer and a good citizen.

Samuel Roberts was the second law judge of Allegheny county, succeeding Judge Addison. He was an able lawyer, and made a noble record. He died the next year after the new charter was given to the university.

Ebenezer Denny was born in Carlisle in 1761, and at the outbreak of the Revolutionary war he volunteered in the Continental army. His career was most honorable and distinguished. Later he took part in the expeditions of Generals Harmar and St. Clair against the Indians in 1790 and 1791, and became aide-de-camp to General St. Clair. He was treasurer of Allegheny county, a member of the board of aldermen, served on the board of the Branch Bank of the United States and of the Bank of Pittsburg, and became a most prominent man of business. He rendered conspicuous service in the War of 1812, and in 1816 became the first mayor of Pittsburg. His wife was Nancy Wilkins, and thus these two famous families of Pittsburg were united. The family is still most prominently identified with Pittsburg and with Western Pennsylvania.

Peter Mowry was a most able and distinguished physician and public spirited citizen, whose name is still remembered in Pittsburg.

William Robertson, Jr., was the single representative from Allegheny among the incorporators, and was a leading citizen and one of the largest land holders in the region.

James Allison, a Marylander, was first admitted to the Washington county bar in 1796, removing to Beaver on the organization of that county in 1802. The same year he was admitted to the Allegheny county bar. In 1822 he was elected to congress and again in 1824, his district being composed of Allegheny, Armstrong, Beaver, Butler and Mercer counties.

These twenty-six men composed the first board of trustees of the new university, and even the brief catalogue which has here been made indicates the remarkable character of this body of men. The men themselves were enough to insure the success of the enterprise of establishing an institution of higher learning in the little city, destined before another century to become so great. One cannot forbear to ask the question as to whether Pittsburg, in the progress of the years, has maintained the relatively large place in the affairs of the nation which it had during the first half of the nineteenth century. It is noteworthy that in that early time lawyers and judges, congressmen and ministers, seem to have had a large place in educational matters than is true today. Fathered by such men, men who have had such a large place in Pittsburg, the Western University should have its hold upon the interest and affections of the entire body of citizens today.

In the charter of 1819 the commonwealth granted to the university forty acres of land in Allegheny. This tract is now a part at least of the Allegheny

Park. It was a sad circumstance that the title of the state to these lands was found to be defective, and in view thereof a grant of $2,400 annually for five years was made to the university. With this money, and with other money subscribed by citizens, a splendid building was erected beside the Academy building at the corner of Third avenue and Cherry Alley, and this building stood as one of the finest in the city until it was burned in the great fire of 1845. Whatever work the university has accomplished since 1819 it is easily to believe that if it could have had a campus of forty acres nearly a century ago it would have been today far in advance of its present growth and influence. It was the expectation, by reason of the grant of land, that the university should be located in Allegheny, but the failure of title referred to resulted in the passing of an act a few years later giving the new trustees authority to erect the buildings in Pittsburg or Allegheny as might be deemed most expedient.

The charter of the new institution of learning was broad and liberal, worthy of the distinguished men who brought it into being. It manifested a breadth of judgment and liberality of opinion far in advance of the times in which they lived. In that day denominational feeling and rivalry were intense, but the provisions of the charter were such as that no distinction should be made in the student body as to creed or color; and as to the instructors—ability ability to teach and high moral character were the fundamental requisites. Persons of every religious denomination were eligible to election as trustees, and likewise persons of every denomination were eligible to election at the head of the institution or to a professorship therein. Thus in 1819 a charter was given as broad and comprehensive as any charter could be given today.

The first faculty was a conspicuous illustration of the broad spirit displayed in the charter itself. It was not until 1822 that a full faculty was engaged and the work organized; but when this was done the result must have been extremely gratifying to the friends of the college. Rev. Robert Bruce, D. D., one of the incorporators, was elected principal and professor of natural philosophy, chemistry and mathematics. As already stated, he was a prominent member of what is now the United Presbyterian Church. Rev. John Black, D. D., was made professor of ancient languages and classical literature. Dr. Black was a distinguished pastor in the Reformed Presbyterian Church. Both Drs. Bruce and Black were graduates of the University of Glasgow. Rev. Elisha P. Swift was elected professor of moral science and evidences of christianity. Dr. Swift was the first pastor of the First Presbyterian Church of Allegheny, who, with his son, served that church until the present pastorate of Dr. Kennedy, which began about 1889. Rev. Joseph Elory, D. D., professor of rhetoric and belles-lettres, was also a Presbyterian clergyman, who later removed to New York where, with remarkable eloquence and power, for fifty years he was pastor of the Scotch Presbyterian Church. These four men, representing the United Presbyterian, the Covenanter, and the Presbyterian Churches, were strong men, but the remarkable fact is that the fifth member

of the faculty, the professor of modern languages and universal grammar, was Rev. Charles B. Maguire who was the first Roman Catholic priest permanently located in Pittsburg, and was founder of St. Paul's Cathedral, the congregation of which has but recently dedicated the splendid cathedral building at Fifth avenue. Father Maguire was a warm personal friend of Dr. Bruce and Dr. Black and was a man not only of extensive learning but of ready wit and popular gifts. Thus was exhibited a catholicity of spirit—Romanist, Presbyterian, Reformed Presbyterian, and United Presbyterian—working together on the same faculty, a fact prophetic of the entire future policy and history of the university.

Dr. Holland in his sketch quotes from the address of Hon. Wilson McCandless, a distinguished alumnus, in connection with the reopening of the institution in 1856 wherein he gives an account, as an eye witness, of the inauguration of the first faculty. This took place on May 10, 1822, in the First Presbyterian Church. The quotation is as follows:

"The nucleus of this institution (said the judge) was the old Pittsburg Academy, whence emanated many master spirits who have illustrated the genius of our government and people. The Western University was first inaugurated in 1822 with flattering and brilliant expectations. I was an academy boy then, and remember well the installation of the first faculty. It was a public pageant in which the people and civic authorities participated, and was attended with more than ordinary pomp and ceremonial. There was a procession, with music, banners, and badges, in which the city fathers, the judiciary, gentlemen of the different learned professions, the trustees, and students marched to the old First Presbyterian Church, where the venerable and accomplished Dr. George Stevenson, the president of the board, delivered the inaugural address to the faculty, which was happily responded to in the solid, massive eloquence of the Rev. Dr. Bruce, the principal."

During the period of the history of the university in which it did college work only or college work along with academy work it seems best to distinguish periods according to the administration of the several principals or chancellors, taking note particularly of the curriculum, student body, and material advancement. In these three consists the elements and materials of growth. For reasons already given it is not possible to set down with any completeness or even with any degree of accuracy the early facts which would be of particular interest. All that can be accomplished will be to indicate something of the prosperity, the reverses, and the vicissitudes of the period.

1. The administration of Dr. Bruce, 1822-1843, with the exception of a single year, 1835-1836, during which Rev. Gilbert Morgan was the incumbent.

The loss of the records makes it impossible to know much of the number of students during this administration. We do know that the services of this remarkably able faculty were eminently successful. Dr. Black was related by marriage to Dr. Wylie, the vice-provost of the University of Pennsylvania, and he himself had once been an instructor there. The curriculum which had been drawn up by a committee of the board, in the making of which, doubtless

Drs. Bruce and Black had large influence, was one which contemplated a breadth and scope for the new university far in advance of anything ever contemplated west of the Alleghenies, and equal in its thoroughness and completeness to that of the oldest and best established institutions of the East. These men were men of large vision and their thought for Western Pennsylvania was that there should be a university as complete in its curriculum, as finely appointed in its equipment, and as thoroughly adapted to the needs of all the people as any university could furnish in any community in the land.

In the matter of endowment, little or nothing was done to add to the resources of the institution. The fees of the students were the only sources of revenue for the payment of professors. As part of the academy building or adjoining it was a residence for the principal. The college building was deemed almost magnificient in that day, and with the two buildings without much equipment, the work was carried on successfully and efficiently. Science at that time had little place in American colleges. Languages, pure mathematics, belles-lettres, philosophy, were the chief elements of the curriculum. These able and learned professors did their work with remarkable fidelity and efficiency. The Hon. Thomas Mellon, who graduated from the university in 1837, pays high tribute to the earnestness and scholarly atmosphere of the college when he states that after visiting other institutions he came back to enter the university in 1833, choosing it as the very best of them all.

In the matter of the student body we can infer much from the quality of the men who graduated during this period. The first class, 1823, consisted of but three members, all ministers and all able men. The first upon this list, and therefore the first upon what has become a roll numbering thousands, was Thomas C. Guthrie, who received the degree of Doctor of Divinity from Franklin College, and who, until his death in 1876, was a most honored and successful clergyman in the United Presbyterian Church. The other two men were Rev. Alexander Logan and Rev. Samuel Ferguson.

The class of 1824 numbered seven. The names of six of these are preserved. Perhaps the most distinguished of this number was Hon. William W. Irwin. He became a member of the Allegheny county bar May 6, 1828; was mayor of Pittsburg in 1840; a member of congress in 1841; charge d'affaires to Denmark in 1843; Mr. Irwin was a great man and did a great man's work in the world.

The class of 1825 graduated ten members, of whom the names of nine are preserved. The first on this list was Honorable Daniel Agnew, LL. D., whose influence in the legal affairs of the state has been exceeded by but few men. He was one of the ablest lawyers of his time, and for long years served as the chief justice of the Supreme court of Pennsylvania. Judge Agnew's decisions are most able and his impress upon the affairs of his state has been indeed remarkable. For long years he was the oldest living alumnus of the University, a distinction now, since Judge Agnew's death on March 9, 1902, held by Hon. Thomas Mellon of the class of 1837.

Another member of this class who reached great distinction was Hon. Joseph Buffington, whose life for the most part was lived in Kittanning. He was twice elected to congress; was appointed judge of the Eighteenth judicial district; was offered by President Filmore the chief justiceship of Utah, an office he declined to accept; and in 1855 was elected judge, and later re-elected in the Tenth judicial district. He resigned from office in 1871 and died in Kittanning February 3, 1872. He was certainly one of the ablest judges of his time.

The class of 1826 numbered about a dozen men, a number of whom attained eminence both in church and state. We can mention only one or two of these. Hon. Walter H. Lowrie, LL. D., was admitted to the Allegheny county bar in 1829. In 1846 he was appointed judge of the district court of Allegheny county, and in 1851 was elected judge of the supreme court of Pennsylvania for a term of twelve years. In the same year he was commissioned chief justice of this court and later was president judge of the Thirtieth district until his death in 1876. He was a distinguished lawyer, an able jurist, a man also of the highest intellectual attainments and purest character.

Another member of this class was Hon. Wilson McCandless, LL. D., whose name has been already mentioned. He was born in Pittsburg in 1810, and was admitted to the bar in 1831. He was a member of the electorial college several times, twice serving as president; appointed judge of the district court of the United States in 1859, where he served until his retirement in 1876. He received the degree of Doctor of Laws from Union College in 1862. He died June 30, 1882. Judge McCandless was distinguished alike for his noble personal presence, his superior intellectual power, and his fine moral character. He is described as a model lawyer at the bar, and a model judge on the bench. In the presidential contest of 1852 there was but one vote in committee between Franklin Pierce and Judge McCandless for the nomination for president. As Pierce was elected, Judge McCandless thus came very close to being president of the United States.

It is impossible in this brief sketch to make particular mention of other classes which graduated during the administration of Dr. Bruce. Each class produced one or more men who attained to considerable eminence. It is an interesting fact that in the earlier years of the university most of the graduates entered the ministry. Some of these were among the most prominent in their several denominations. The mere mention of the names, some of them repeated again and again in the several classes, will indicate how closely the university was in this period wrought into the life of both church and state in Western Pennsylvania. Kerr, Hamilton, McMasters, Fulton, McClelland, Bruce, Sproull, Wallace, Blair, Liggett, Shields, Simpson, Pentland, Robinson, McKinstry, McElroy, Taggart, Lea, McGill, Black, Prestley, Mowry, White, Herron, Dick, Scully, Murray, Mellon, Harshaw, Rea, Young, Peacock, Wylie, Carnahan, Moore, Harper, Wilson, Wilkins, Oliver, Irwin, Dodds—these are a few of the names which appear.

It is fitting, however, that special mention should here be made of the oldest living alumnus of the university, a graduate in the class of 1837—Hon. Thomas Mellon. Mention has already been made of the care which young Mellon exercised in selecting a college. While a student he brought to his work the same intensity of application and discrimination of judgment which made him so eminently successful in after life. For a time after his graduation he filled a chair as instructor in Latin in the university. He began the practice of the law in 1839, and attained a large and lucrative practice. In 1858 he was elected judge of common pleas court, No. 1, but declined re-election. After this he engaged in banking with his sons, the firm immediately taking rank as one of the strongest in the country, and today it maintains this high place. Judge Mellon has always been distinguished for accurate knowledge, clearness of perception, keenness of vision, quickness of decision, honesty of purpose, and integrity of character. At this time, nearly ninety-five years of age, he is spending his closing days tranquilly in his beautiful home on Negley avenue. Surrounded as he is by his sons and daughters, his grandchildren and his friends, held in the highest regard by the people of his city, he can look back over the past with pride and forward into the future with serene trust. As the oldest living alumnus of the university, the editors of the first Junior publication dedicated the volume to him.

The foregoing, brief as it is, will serve to indicate the high place among institutions of advanced learning the Western University took in the first years of its history. It is not too much to say that when Dr. Bruce resigned in 1843 he handed over to his successor one of the foremost colleges west of the Alleghenies.

2. The period from 1843 to 1858, including the administration of Rev. Heman Dyer, D. D., Rev. David H. Riddle, D. D., and Rev. John F. McLaren. This period in the history of the university was a period of storm and stress.

If it were possible for a college in an intelligent American community to be killed, surely the Western University would have died under the multiplied calamities which visited it in this fifteen years of its history. Two years after Dr. Dyer assumed the principalship Pittsburg was visited with the great fire which destroyed the lower portion of the city, and with it the university buildings. Almost at once a new building was erected on Duquesne Way, which building was dedicated September 18, 1846. Meanwhile an attempt had been made to do the work of a real university. Up until the reorganization of the curriculum in 1889 a preparatory department was carried on, though during the entire period greater emphasis was put upon the college. As early as 1843 a Law School was organized, and the Hon. Walter H. Lowrie was appointed professor. After the completion of the new building on Duquesne Way two features were prominent in the curriculum, namely the courses in law and the creation of a committee on education, charged with the public examination of the students. These two features were the early prophecy of the present law department and of the teachers' college, which is soon to become a depart-

ment of the institution. The graduating classes from 1844 to 1849 were for the most part larger than at any preceding period of the history of the university. Such men as Rev. Charles A. Holmes, D. D., LL. D., of the class of 1844, once president of the Iowa Wesleyan University; Hon. Robert B. Carnahan, of the class of 1845, who became United States district attorney for the Western district of Pennsylvania, and who, until his death in 1890, was one of the most prominent and able members of the bar, the father of Hon. Thomas D. Carnahan, recently elected one of the judges of the common pleas court, No. 4; Hon. S. J. R. McMillan, of the class of 1846, United States senator and late chief justice of the Supreme court of Minnesota; Hon. Christopher Magee, LL. D., of the class of 1848, formerly judge of common pleas court, No. 2, and still a resident of Pittsburg, enjoying the love and admiration of his judicial brethren of the bar, and all the people; Hon. John H. Bailey, of the class of 1849, formerly judge of common pleas court, No. 1, ranking high as a lawyer, judge, and citizen until his death; and also a remarkable quartet of the same class, all living,—Rev. Joseph Horner, D. D., and Col. Algernon Sidney Morgan, both prominent and sterling citizens of Pittsburg, James D. Layng, president of the Lincoln National Bank, New York, and Andrew Watson Pentland, chief of ordnance of the War Department, Washington, D. C.,—these and a multitude of others like them are some of the illustrious men whom the university graduated in this period up until 1849.

In July of this year the new university building was burned. Coming so shortly after the calamity of 1845, the disaster seemed to be too great for recovery, and the trustees—cast-down—dismissed faculty and students, and the work of the university was suspended until 1855. During this period Rev. David H. Riddle, D. D., president of the board of trustees, was also president of the university. The committee of the board, consisting of Thomas Bakewell, W. H. Denny, William J. Totten, and Orlando Metcalf, invested the funds received from insurance, $9,600, and a little later the $7,000 received from the sale of the ground, so that when the institution should resume, if ever, the principal, with its increase, might be available for the purchase of ground and the erection of a building. Mr. John Harper, the treasurer of the board, was indefatigable in his efforts to bring about a resuscitation of the institution. In 1851 a committee was appointed to seek out a new site. In 1853 another committee was appointed for the same purpose. By this time the funds had amounted to over $26,000, and the committee was ready to recommend a lot on the corner of Ross and Diamond streets, the price of which was $8,200, leaving available for the building about $18,000. On June 9, 1854, the contract for the building was let for $18,300, and work upon it was begun. This building, which still stands, and is now occupied by the law department of the university, and by the Pittsburg Academy, provided fourteen class rooms, as well as library and laboratories.

On the 8th of October, 1855, under the guidance of Dr. Riddle, college exercises were resumed, and a year later, December 19, 1856, Rev. John F. Mc-

Laren, D. D., was formally inaugurated as principal. Rev. John Upfold, one time president of the board of trustees, but at the time bishop of the diocese of Indiana, delivered the address. Dr. McLaren held the office for three years and rendered most effective service. The student body was of considerable size, and many of them became prominent later in life. Dr. McLaren naturally found that his work consisted largely in the relaying of the foundations. He accomplished this task splendidly and was able to deliver over to his successor an institution which was again healthy and vigorous in its life and growth. This brings us to the close of this second period of the university history. Upon the foundation so laid a greatly enlarged institution was to be built.

3. The period from 1858 to 1892, including the administrations of Dr. George Woods, Dr. Henry M. McCracken, and Dr. Milton B. Goff.

In 1858 George Woods, LL. D., a graduate of Bowdoin, eminently qualified, full of enthusiasm, matured by experience as an educator, was made principal of the university. Dr. Woods insisted that an endowment should and could be procured, and coming to the university in this spirit it is not at all strange that he should communicate a part of his enthusiasm to the people of the city and gain their financial sympathy and support. Neither is it strange that the university should, under such an administrator, enter for the first time upon a career of material enlargement. In August, 1858, the institution received from Thomas Hind its first bequest, a valuable collection of geological specimens. Mention has been made of the part Mr. John Harper took in the effort to re-establish the university, and it is interesting to note that in October of 1859 he was largely instrumental in securing money for the purchase of equipment for a chemical laboratory. Three years after Dr. Woods became president, the great War of the Rebellion began, and again it is not strange that, with the emptying of our institutions of learning in order that the youth might fight for the Union, only a few should be graduated during this period. Yet even this time did not pass without very considerable enlargement. In 1861 a large room was fitted up as a gymnasium, indicating a care for the health of the students not usual at that time. In 1862 an appeal was issued for money with which to endow professorships. In 1863 additional ground was purchased along the southern line of the university property. In 1864 an endowment of $20,000 for the Chair of Natural Sciences was completed through the liberality of William Thaw, James Park, Jr., Isaac Jones, Alexander Nimick, William Nimick, S. M. Kier, Honorable J. K. Moorhead, Nathaniel Holmes, Alexander Bradley, William Frew, H. B. Wilkins, Josiah King, and Joseph McKnight. William Thaw and Josiah King had previously paid the salary of the professor in this department. In 1865 the Chair thus endowed was changed to that of Chemistry and Mineralogy. In March of this year a Chair of Engineering was established. In June of the same year $20,000 endowment was secured for the Chair of Astro-Physics, and at the same time the property of the Allegheny Observatory, consisting of ten acres of land on Observatory Hill, with the building, furniture, and equipment, was conveyed in

trust to the university. In another place will be found a brief history of this important department of the university. In 1871 William Thaw made a most generous offer to contribute $100,000 toward the permanent endowment of the university on condition that the citizens of Western Pennsylvania should contribute a like amount. The offer was accepted, steps taken to meet the conditions, and four years later, in 1875, the amount was fully secured. Meanwhile in 1873, the university received by bequest the large and valuable library of Robert Watson, and in the same year the cabinet of Rev. Joseph Travelli was purchased and added to the Museum. By this time it had become necessary to enlarge the building in order to meet the growing demands of the university, and this, too, was accomplished in 1875. This brief statement serves to indicate somewhat of the material growth of the university during the administration of Dr. Woods. Not only was there growth in the student body, in the faculty, in the equipment, in laboratories, and in the building itself, but at the conclusion of Dr. Woods' administration the endowment of the institution had become at least $240,000.

In the curriculum and in the character and extent of the work, the university was also greatly enlarged during this administration. In 1872, on application of the university, through a committee appointed for the purpose, the legislature of the commonwealth very greatly increased the powers of the university. The mayors of Pittsburg and Allegheny were made ex-officio members of the board of trustees; the title of the presiding officer was changed from principal to chancellor; the board itself was increased to thirty members, and the right was given to receive and administer any property, providing the net annual income does not exceed the sum of $200,000. Under these enlarged powers still greater prosperity was made possible.

Back in 1860 the academy department, which had not been revived after 1849, was established with H. H. Northup as principal, and the work of the academy was continued until about 1889 when, because it threatened to overshadow the work of the college, it was discontinued, becoming at the time a separate institution under the name of Park Institute. Mr. Northup had as his successors Joseph H. Montgomery, Rev. Samuel Findley, Dorville Libbey, Jeremiah E. Ayres, and in 1869 Prof. Levi Ludden became the principal of the department, and continued in that position until 1889, when the work was closed.

In 1862 instruction in military tactics was undertaken, Major F. E. Chalfant being the first officer, and this work was continued under successive officers detailed for the purpose from the regular army until 1882, when the sale of the university building compelled the abandonment of this important exercise.

In the matter of faculty Dr. Woods was equally successful in procuring the services of eminent men. In 1870 Prof. Paul F. Rohrbacher was elected to the Chair of German and continued to fill that chair with remarkable ability for twenty-five years. In 1872 Prof. John W. Langley was made

professor of chemistry and in 1875 was succeeded by Prof. Francis C. Phillips, who has has been with the university ever since, and who today is the head of that important department. Still earlier, in 1865, Prof. B. C. Jillson had been called to what was then known as the Chair of Natural Sciences and he made a very considerable contribution to the work of biology, at that time a study very inadequately presented in most institutions. In the same year Milton B. Goff was made professor of mathematics, a man whose work was so successful as later to lead to his election as chancellor of the university. Another man whose memory is held in fond remembrance was Joseph F. Griggs, professor of Greek, and whose connection with the university continued for about forty-five years. Edward P. Crane was another man who for long years rendered efficient service as a member of the faculty. Mention will be made in connection with the history of the observatory department of the advent of Samuel P. Langley, who in 1867 was made director of the observatory, in which position he rendered most distinguished service for twenty years, at the end of which period he became secretary of the Smithsonian Institute at Washington.

The culmination of the work of Chancellor Woods was probably the year 1875. From that on until the close of his administration he gave himself to the development of the internal affairs of the institution. During this period a very large number of men were graduated who afterwards became eminent and some of whom are among the ablest and most influential factors in the development of the city today. Where there are so many it would seem invidious to mention only a few. From this on, therefor, no particular mention, except by incidental reference, will be made to the alumni of the university. It is proper, however, to call attention to the noteworthy fact that the mayor of Pittsburg at the time the consolidation of the two cities was accomplished—in December, 1907, was Hon. George Wilkins Guthrie, an alumnus of the university in the class of 1866. It is a happy circumstance that the Western University of Pennsylvania, Pittsburg's own university, should give to Greater Pittsburg its first chief executive.

The friends of the university will hold in grateful remembrance the name of Chancellor Woods. He handed over to his successor a college well equipped, for that period well endowed, and with splendid prospects for future development and growth. Chancellor Woods continued a resident of Pittsburg after his resignation in 1880 as the representative of the Equitable Life Assurance Company, continuing in this position until January 1, 1890, although he retained an interest in the company until his death, June 7, 1899.

In 1880 Rev. Henry Mitchell MacCracken, D. D., LL. D., was elected as the successor of Chancellor Woods. Dr. MacCracken remained at the university only three years, resigning in 1884 to accept the chancellorship of the University of New York, with whose splendid work in that institution up until the present time the educational world is familiar. The three years were full of discouraging conditions. In the summer of 1882 the court house was burned,

and on June 16 of that year the university buildings were sold to the county for the temporary housing of the courts during the erection of the new building. This necessitated the transfer of the work to some other location, and amid many difficulties and disadvantages it was for several years carried on in the United Presbyterian and Reformed Presbyterian Theological Seminaries on North avenue, Allegheny. During Dr. MacCracken's administration an important addition to the faculty was made in the person of Daniel Carhart, the distinguished author of several well known works in mathematics and engineering. Dr. Carhart is still a member of the faculty and very largely through him the mathematical courses were re-organized, courses in engineering were established, and that department of the university brought to the place where it is today.

The successor of Dr. MacCracken in 1884, was Milton B. Goff, for many years the well known professor of mathematics in the university. He continued in this office until his untimely death in the fall of 1890. For several years the work was continued in the temporary quarters on North avenue, but it was obvious that a permanent location must be secured at the earliest possible moment. In 1888 steps were taken to provide new buildings, and inasmuch as both the observatory and the property of the observatory had been given over to the university in the deed of trust of 1867, it was felt to be the wisest plan to erect the new buildings upon this property. Ten acres were available for the purpose. At that time the trend of population was only beginning to turn toward the eastern part of the city, and no one could foresee at that time the disadvantages connected with Observatory Hill as a place for the University. A committee consisting of James B. Scott, president of the board, together with Charles J. Clarke, Rev. W. J. Robinson, D. D., William J. Sawyer, Hon. J. C. Newmeyer, William Thaw, Jr., Reuben Miller, and Chancellor Goff was appointed to prepare plans and see to the erection of the buildings. Two commodious buildings were erected west of the observatory, but in such a way as not to interfere with its work. These buildings were fully completed in the fall of 1889, and in January, 1890, the work of instruction was transferred to the new quarters.

The committee with equal wisdom and success formulated the new and advanced curriculum of studies and recommended the discontinuance of the preparatory department, and also recommended the creation of laboratories for the departments of chemistry and engineering, thus providing for these departments equipment suitable for their work. The School of Engineering thus was established as a permanent and important department of the university with courses of study in civil, mechanical and electrical engineering equal to any in the country. To this later the School of Mines was added.

It was during the administration of Chancellor Goff that the university met with a seemingly irreparable loss in the death of William Thaw, August 17, 1889. In the sketch of the observatory department mention will be made

of Mr. Thaw's contribution there. To the university, however, in its educational work he was an equally sympathetic, wise and generous benefactor. Mention has already been made of his contributions to the support of the work, of his part in the first endowment, and of his generous gift of $100,000 to the university in 1875. At his death he bequeathed the university another $100,000. His total gifts were probably nearly $400,000. His greatest gift, however, was the gift of himself, for always was he ready with his counsel, and always did he bring to bear upon the questions the wisdom and foresightedness which characterized his great mind. In his death the university lost the man who had done most for it and who, up until the time of this writing, has done most for the university he loved. It was eminently fitting that the junior class of the year 1908 should dedicate their annual publication to the memory of William Thaw, and it is equally proper that that dedication as well as the other references to him should be perpetuated in this brief history.

The Western University of Pennsylvania is striving after a great and high ideal. Who is more worthy of honor from it than one who, laboring "to push forward the frontier of human knowledge," did most, personally and financially, to preserve and strengthen the University in the part, and who, if he were yet living, would be the strongest supporter of the Greater University of the future? Therefore, in gratitude for his great gifts and services, we respectfully dedicate this record of a year of progress to that loyal friend and trustee, WILLIAM THAW.

Mr. Thaw was richly endowed with varied and remarkable gifts. He possessed unusual powers of discernment, sound judgment and rare executive ability, which enabled him to prosecute with phenomenal success the various enterprises in which he engaged, and won for him ample means, as well as a high and honorable position in the business community. He was by nature generous; and this inherent disposition, sanctioned by Divine Grace, made him keenly alive to the appeals of the suffering and the unfortunate. In his daily experience he found it more blessed to give than to receive. Realizing that wealth was a trust committed to him by his Creator, his life was characterized by the most liberal and widespread philanthropy. Every enterprise calculated to advance the interests of religion, to elevate and purify human society, to widen and improve the sphere of human knowledge, to relieve the unfortunate, or to mitigate suffering, found in him an energetic and munificent benefactor.

From the time he became a trustee of the university, more than twenty-eight years ago, until the day of his death, he was constantly active and liberal in promoting its welfare. Amid his many cares and anxieties, and the ceaseless demands upon his time and attention, he was seldom absent from official meetings. To the university he gave freely of his time, of his thought, and of his means; and it is only just to say that but for his earnest efforts, his wise counsel, his unfailing liberality, it would not have attained its present prosperity, or have the bright prospects of future usefulness now opening hopefully before it.

In the death of William Thaw our country has lost an honorable and patriotic citizen; our community an honorable, enterprising and useful member; our religious and charitable institutions an interested, unfailing and generous friend; the university a wise counselor and liberal supporter; and the cause of science one of its most zealous and unselfish benefactors.

"It is the happy experience of most American colleges to have, at some time in their history, some man who nurtures and loves them with such devotion as to make his memory beautiful for all time. In the history of Western University of Pennsylvania, William Thaw was one of these men. In 1864 he was one of the largest contributors to the $20,000 endowment of the Chair of Natural Sciences, but for years previously he and Josiah King had provided the annual salary. In 1875 he gave to permanent endowment $100,000. To the Observatory he gave $30,000. In his will he bequeathed to the university another $100,000. He contributed other sums from time to time. The writer has not at hand the data which show the exact aggregate, but it is doubtless as much as $400,000. The money, large at it was—in that day vastly larger than the same sum would be today—was not, as the record shows, the largest of his gifts; for his anxious thought, his tender solicitude and devotion, his loyal and unwavering affection, were worth even more than the money. As the university enters upon a new period in its history, we ardently hope and confidently expect that both love and gifts will be lavished upon it without stint, in emulation of the worthy example set by this man to whose memory this volume is dedicated.

CHANCELLOR S. B. MCCORMICK."

"My compensation comes to me in the having done somewhat of that which a man with my means ought to do for his kind, with the exceptional satisfaction of having the privilege of giving to the race, so far as mere material means can do it, the labors and results which might otherwise have been delayed or defeated.

WILLIAM THAW.

"A great man, not only as a philanthropist in the largest sense of that word, but one whose whole life was characterized by that love of truth, which prompted him to noble deeds in behalf of advanced scientific research, and in developing a knowledge of the good and beautiful in nature. He shall always live in our memory. The monuments he has left behind him have been hewn from the quarries of solid truths—truths that shall live when monuments of granite have crumbled into dust; aye, until the stars themselves have faded, and the new dawn has been ushered in.

JOHN ALFRED BRASHEAR."

In the fall of 1890, only a few months after the new buildings were occupied, Chancellor Goff, while accompanying a party of engineers from Europe, on a visit to the Homestead mills, met with an accident which was followed by pneumonia, and which resulted in his death. The plans which he had made for the development and expansion of the university were thus suddenly terminated. Chancellor Goff was an able man, and his work was most highly appreciated by the trustees and friends of the university. His death was most untimely and was greatly lamented. For a time it seemed that the work which was begun so auspiciously in the new quarters must languish. At the close of his administration the university was doing college and engineering work only,

and the total enrollment in all the departments numbered one hundred and one.

It was at this time that Rev. William Jacob Holland, D. D., was mentioned as the successor of Chancellor Goff. In the spring of 1891 Dr. Holland was elected to the chancellorship. Inasmuch as the very next year, under the guidance of the new chancellor, the university began the process of expansion wherein real university work was for the first time seriously undertaken, the writer will be pardoned for beginning the third period of the university's history with the accession of Dr. Holland. From this time on it will be more convenient to present the facts by departments as well as by administrations. The people of the city had been so long accustomed to look upon the institution as a *College* that it was not easy to make them familiar with the new idea of a *University*. While several attempts had been made to establish a law school, as will hereafter appear, and while an attempt had also been made some years before to establish a medical college, as will also appear, yet as a fact the only work which the institution had really done for any length of time was academy, college and engineering work. It was the conviction of Dr. Holland that the time had at last come when the university should be a university in fact, as for nearly three-quarters of a century it had been in name. He was convinced that the great region of which Pittsburg is the center must have professional schools in order to accommodate the needs of the vast population. The distance to schools of this kind, either east or west, was too great to permit any considerable number taking advantage of them. Dr. Holland, therefore, set to work almost at once to realize this plan in the best way in which it could at that time be accomplished.

The administration of Chancellor Holland continued for exactly ten years. During that period he realized in a very large degree the fulfilment of his hopes and plans for the university. It had at that time become a university with seven departments—college, engineering, observatory, medicine, law, dentistry and pharmacy. Not yet, at the time of his resignation in the fall of 1900, had he brought these departments into one compact whole. He had, however, brought them into existence and bequeathed to his successors the task of bringing them to one location, and so uniting them together as to give them unity, strength and influence commensurate with the region which brought them into being.

A. The College.

B. The Engineering Schools.

It is necessary to consider these two departments together, because they are upon the same foundation and occupy the same buildings. Dr. Holland's interest in the creation of the professional departments only served to increase his zeal for the college and also for the engineering school. During this administration the bequest of William Thaw, amounting to $100,000, became available. Other gifts of money, apparatus, specimens, were made. One of the most noteworthy of these was the cabinet of Misses Jennie M. and Matilda

H. Smith, which occupies a room specially fitted up by these liberal and kind friends of the university until it has become a most beautiful as well as a most useful addition to the equipment of the university. Every year these friends, with an intelligence and discrimination equal to the sincerity and liberality of their friendship, increase the obligation of the university to them by adding something in some department to the volume of their gifts. Scholarships amounting to $31,000 were given by Hon. and Mrs. Felix R. Brunot, whose names are enshrined among the generous benefactors of the university. In 1893-4 valuable additions were made to the instrumental equipment of the laboratories. In the latter year the citizens of Pittsburg contributed a fund for the entertainment of the Grand Army of the Republic, $5,728 of which formed the basis of a Grand Army of the Republic Scholarship Fund. A School of Mines was established in 1897, the state making an appropriation of $50,000, and the citizens subscribing an equal amount for this purpose. In 1901 a bequest of H. M. Curry amounting to ten thousand dollars for scholarship for the sons of veterans was made. Thus it will be seen that the material equipment of this department was very largely increased during these years of Dr. Holland's administration.

In the matter of curriculum like advancement was made. The Engineering School was made complete not only by the addition of the School of Mines, but by the establishment of a Chair of Electrical Engineering, of which Prof. Reginald A. Fessenden, of Purdue University, was made the first professor. The standard of entrance requirements and the courses in the college were improved. A graduate system of study was adopted, and several courses leading to the doctor's degree were offered. The year in which Dr. Holland laid down the duties of his office the number of students in these departments alone had increased from one hundred and one to one hundred and sixty--seven. Both the college and the engineering schools were in a prosperous condition, ready for continued growth and enlargement.

C. The Observatory.

The department of Astronomical Science, known as the Allegheny Observatory, is one of the most interesting and valuable parts of the Western University. It had its origin in a little gathering of three citizens in the office of Professor Bradley on the evening of February 15, 1859. These three were Prof. Lewis Bradley, Josiah King and Harvey Childs, and the purpose of the meeting was to consider the purchase of a telescope. The outcome was that other citizen were invited to meet with them on the evening of February 22, at which time it was proposed to purchase the telescope and place it upon a house top in the central part of Allegheny. This idea, however, was later abandoned and it was proposed to select a more suitable site, three of which were originallly proposed, one on Seminary Hill, one on Quarry Hill and one on the west end of Seminary Hill, owned by Judge Irwin. The association was popularly known as the Allegheny Telescope Association, and the names of the

men, who had part in it, all of whom, with perhaps one exception, have passed away, are as follows:

C. G. Hussey, Thomas M. Howe, William Thaw, Mary Thaw, Elizabeth Thaw, J. H. Cooper, H. Childs, W. McClintock Robert Robb, J. M. Pennock, Felix R. Brunot, W. S. Howe, G. W. Cass, James Park, Jr., B. L. Fahnestock, C. Yeager, C. McCandless, John Dean, W. Bagaley, H. Harper, J. B. Legget, James Patton, Matthew Ferguson, James McCandless, Josiah King, Charles H. Panster, Alexander Speer, William McKnight, Thompson Bell, J. H. Shoenberger, James Patton, Jr., A. D. Smith, Robert Dalzell, O. P. Scaife, W. Dilworth, Isaac Jones, A. Garrison, Laird Campbell, George A. Berry, John A. Wilson, William Wilkins, R. B. Sterling, Joseph Smith, C. W. Ricketson, R. Ashworth, B. Bakewell, R. S. Hays, William Morrison, Henry Irwin, Louis Jones, W. S. Bissell, B. F. Bakewell, Samuel Gromerly, William Walker, Hay Walker, James A. Wright, N. Holmes, William McCully & Co., A. L. Bollman, J. B. Jackson, Mrs. A. Cosgrove, J. S. Cosgrove, C. Rahm, L. O. Livingstone, James Marshall, J. McD. Crossan and W. F. Johnston.

The site finally selected was the present observatory grounds, on which the university buildings have since been constructed. Mr. Washington McClintock donated a large part of the ground and an additional piece was purchased so as to make a tract of over ten acres. This location was peculiarly fine, as the prevailing winds carried the smoke away from it, insuring good observations in this early period. Funds were readily raised for the purchase of a thirteen-inch telescope, and the proposal of Mr. Fitz of New York for the construction of this instrument was accepted January 31, 1860.

It was not until May 15, 1860, that the Observatory Association was completely organized and directors elected. The members of the first board were Hon. Thomas M. Howe, Dr. C. G. Hussey, Mr. William Thaw, Mr. Josiah King and Mr. John Shoenberger, Dr. Hussey being made president, and Mr. James Park, Jr., was made secretary. On the 22nd of March the act of incorporation by the legislature was approved by Governor Packer.

About this same time the architect's plans were accepted, prepared by Barr & Moser, and the contract for the erection of the building was let. The new building was completed and the telescope erected by the end of January, 1861. Prof. Bradley delivered the address at the time possession was taken of the building and the instrument. On November 17, 1863, Prof. Philotus Dean was elected director of the observatory for one year, serving without salary except the use of the dwelling house free of rent.

On the 10th of May, 1867, a meeting of the association was held to consider the transfer of the observatory and its property to the trustees of the Western University of Pennsylvania. An indebtedness of 12,000 had been incurred, and it was obvious that to insure the best interests both of education and science the observatory must be brought into closer connection with the university, and a fund raised whereby the expenses of the observatory might be met. It was proposed to raise the sum of $30,000. This transfer was made

July 1, 1867, and authority for it was given by the legislature. Thus the observatory became an integral part of Pittsburg's institution of learning.

On August 8, 1867, Prof. Samuel Pierpont Langley was unanimously elected to the Chair of Astronomy and Physics in the university, a part of his duties being to act as director of the observatory. It was also at the same time determined to equip the observatory with transit instrument, chronograph, clocks, etc.

Two years later subscriptions to the debt and endowment fund, amounting at this time to $15,000, were made by Messrs. Hussey, Howe, Thaw, Clark, Fawcett, Zug, Knap, Lyon, Hostetter, Smith and Cass. As this left $3,000 for endowment, Mr. Thaw added $17,000 to make the total $20,000. At this time also it was found that Professor Langley must give most of his time to the observatory and be free to deliver lectures in the university only as he wished.

From this time on the observatory has had a large place among similar institutions in the world. Professor Langley, with his able assistants, Dr. A. E. Frost, Prof. Keeler and Mr. Very, has given to the world a long series of solar observations and made the observatory famous for the study of solar phenomena. It was Prof. Langley who discovered the marvelously delicate thermometer which he called the bolometer, through which he brought to light some of the most important facts in the whole realm of astronomical physics. Dr. Brashear's address, made upon the occasion of the laying of the corner stone of the new observatory building in Riverview Park, from which these facts are taken, contains much interesting information regarding the institution. The discoveries of Prof. Langley in truth formed an epoch in astronomical science. An important practical work was the introduction of the time service, which has from that time been kept up without any break. In all the long years of Prof. Langley's service he was supported by the splendid liberality of William Thaw, who supplied funds for the expedition to Mount Whitney, and also for the carrying on of interesting studies in the selective observation of the earth's atmosphere and in scientific experiments in aerial navigation. It is not possible in the brief compass of this sketch to set forth in any detail the remarkable work of Prof. Langley. Western Pennsylvania, however, owes a debt of gratitude to him and to Mr. Thaw, who, by his financial help, made his work possible—a debt which can be paid only by thoroughly equipping the Western University for the great work yet to be done.

In 1890 Prof. Langley, whose name had become eminent in the scientific world, was called to the highest scientific position in America, namely, the secretaryship of the Smithsonian Institute in Washington, D. C. The work Professor Langley did in that institution until his death only a few months ago is known to all the world. During his directorate of the Allegheny observatory he contributed in all fifty-four papers to scientific journals. During his directorate he had at different times the assistance of Profs. Frost, Hall, Very and Keeler. Prof. Frost is still an honored and able professor in the university.

In May, 1901, Prof. James Edward Keeler was unanimously elected to the directorship of the observatory, which position he at once accepted. He had earlier spent a year studying with Helmholtz and Quinke in Germany, but in 1886 had been called to the Lick observatory in California, and for many months was the only astronomer on that famous mountain. His work at Lick gave him international fame. His magnificent drawings of the planets Jupiter, Saturn and Mars, it is said, have never been equalled. On his arrival at the Allegheny observatory he found it inadequately equipped for the kind of observations he wished to make, and Mrs. William Thaw contributed the money to construct a spectroscope, designed by Prof. Keeler himself, and Mr. William Thaw, Jr., supplied the means for a new driving clock and the remounting of the thirteen-inch equatorial. The Junta Club of Pittsburg donated a sum sufficient to place a modern shutter on the dome. Thus Prof. Keeler was ready for the series of brilliant discoveries it was his to make in the coming years. Sixty-two papers he contributed to various scientific journals during his directorate, some of them of the most vital importance. Dr. Brashear says that had Dr. Keeler made no other discoveries than the solution of the character of Saturn's rings, his name would be forever remembered in the annals of scientific discovery.

In 1898 Prof. Keeler was elected director of Lick observatory. He resigned the directorate of the Western University observatory with the greatest reluctance, not only because of the ties of personal friendship, but because it was in his heart to see a new observatory building in Allegheny. He was a most charming man in his personal manners, a scientific investigator of the highest type, and was in all his relations almost ideal. His death on August 12, 1900, was not only a great loss to the scientific world, but caused great sadness among the multitude of his friends in Pittsburg.

After the departure of Prof. Keeler, Prof. Frank Very continued the work in the observatory and after an interval of about eighteen months, Prof. F. L. O. Wadsworth was elected director. Meanwhile, through the devoted efforts of Dr. John Alfred Brashear, the city of Allegheny had donated to the university two acres of land in Riverview Park, and $150,000 was contributed by the citizens for the erection of a new observatory. Steps were taken for the erection of this building, in working out the details of which Prof. Wadsworth gave almost a year of his time. The location of the observatory is one of unsurpassed beauty and especially adapted for the purpose of such an institution. In 1905 Dr. Brashear secured an additional $75,000 with which to complete the building which, at this writing, is almost finished. Dr. Brashear secured other funds, so that the total amount in building and in instruments is at least $275,000.

Prof. Wadsworth continued as director of the observatory, resigning in January, 1905. In the spring of 1905 Dr. Frank Schlesinger was made the director, and under his oversight the work of completing the building has been practically brought to a finish. He also is seeing to the installing of the large

instruments. Some of these instruments were donated by friends of the university as follows:

The thirty-inch objective for the great telescope, costing $25,000, was the gift of Mrs. William Thaw, Jr.; the Mellon spectograph, costing $1,500, the gift of Mr. and Mrs. A. W. Mellon—this for the Keeler memorial telescope, whose cost was about $15,000; the clock and other fixtures, costing about $2,000, the gift of the Misses Jennie M. and Matilda H. Smith; the lecture room fittings, costing $2,500, the gift of Mr. and Mrs. Robert C. Hall. The securing of this additional $75,000, to which many contributed, was made possible by the initial gift of $32,500 by Mr. Henry C. Frick.

The new observatory is now ready for the work for which it was originally instituted. With a superb building, splendidly equipped, there is no reason why this department of the university should not maintain and carry still farther the great reputation achieved under Langley and Keeler. Dr. Brashear loves the observatory as a father loves his child. Long before he became the famous optical instrument maker he has become, and made himself known not only to the scientific world, but to every man, woman and child in Greater Pittsburg, he visited the old observatory, and there drank in the inspiration which has led him on to his present lofty position. With Dr. Brashear as the chairman of the committee on observatory and with the co-operation of Director Schlesinger and with his able and faithful assistance, there is no reason why the observatory should not accomplish all the friends of the university hope for it.

D. The Western Pennsylvania Medical College, the Medical Department of the Western University.

In 1880 an effort was made by the university to establish a school of medicine. While this effort on the part of the university proved unsuccessful, yet as a matter of fact steps were taken to organize a college in the same year under the supervision of Drs. James McCann, J. B. Murdoch, W. J. Asdale, Cyrus B. King, J. Chris Lange, John M. Duff and others. It was not, however, until six years later that the college was in position to receive students. Six years later, in 1892, it became the medical department of the Western University. Twelve years after its organization, in 1898, it had a faculty of fifty professors and assistants, and had during the same year a student body numbering three hundred. In 1907, the twenty-first year of its existence, and fifteen years after its amalgamation with the Western University, the faculty of the Medical College is eighty-two, and the number of its students more than three hundred and fifty. It is the only medical school in Pennsylvania outside the city of Philadelphia, and it today stands as one of the strongest. Its alumni are scattered all over the land, many of them the leading physicians and surgeons in Western Pennsylvania.

The college buildings are modern and substantial brick structures, three in number. The main college building was erected in 1886, and has since been rebuilt and enlarged, so that it now stands five stories high, providing three large

lecture rooms, a commodious dissecting room, seven laboratories, a students' assembly room, reception rooms, store rooms, offices, and other apartments. The Kaufmann Clinic was erected through the liberality of Isaac Kaufmann and other friends, and here over ten thousand patients are treated annually. It is the clinic of the college and affords a vast field for the instruction of the student in medicine. The third building, the Reineman Hospital, was the benefaction of the late Adam Reineman. It stands on Millwood avenue, two blocks from the main building and Kaufmann Clinic, which are located at Thirtieth and Brereton streets, adjoining the West Penn Hospital.

The medical department has special departments for the study and treatment of the eye and ear; for diseases of women; for diseases of children; for nervous diseases; for diseases of the nose and throat; and for other special diseases. The courses of study extend over a period of four years, and offer their advantages to both men and women without distinction. The dean of the department at this time is Dr. J. Chris Lange. The department is in a most flourishing condition, and it is scarcely too much to expect that in the course of time the student body will number five hundred.

E. The Pittsburg Law School, the Law Department of the Western University.

In order to learn the real history of the law school of the Western University it is necessary to go back at least as far as 1843. Inasmuch as this was before the fire, it is imposible to learn with accuracy the date of the establishment of the department, but we know that in that year it was in existence, and that Hon. Walter H. Lowrie, LL. D., was the head of the department. We know also that it was in existence in 1846. We have the names of the faculty of that year which, included Dr. Lowrie. In all probability the department was in flourishing existence from 1843, and perhaps earlier, until the work of the University was temporarily discontinued in 1849. When work was resumed in 1855, it seems that this department was not revived.

In 1870, however, another attempt was made to establish a law department. The catalogue of that year contains the name of William Bakewell as professor of equity, jurisprudence and constitutional law; Hill Burgwin, professor of real estate, practice and pleading; W. T. Haines, professor of criminal and commercial law. The catalog also issues a prospectus of the law school which provided for a course of two years, designed to qualify students for the practice of the law, dividing the year into two terms of four and one-half months each. The catalogue stated, however, that the department was not yet opened, but that it was the expectation to admit students in September, 1871, and that in this event notice would be given in the papers of the city. The catalogue of the next year shows that still the department was only partially organized, yet that lectures were delivered and moot court was held. It was at that time the expectation to make arrangements for a full law faculty. Inasmuch as the catalogue of the following year makes no mention of the law school, the inference is that the lectures were discontinued.

The next attempt to establish a school of law was about the year 1880, when a similar movement was initiated for a department of medicine. This also apparently proved fruitless.

It was not until October, 1895, when the Pittsburg Law School was organized and lectures were actually given as a department of the university. Previous to this time a considerable number of students in other law schools throughout the country gave indication of their willingness to enter the law department should one be organized by the Western University. This was sufficient indication that such a school could not fail of success. Accordingly the university took action with the result that courses covering two years were offered, and the institution was finally opened for the instruction of students. The number the first year was thirty-five. The temporary use of rooms in the Allegheny county court house was kindly tendered by the commissioners of Allegheny county. Almost immediately after the work was begun the law faculty took steps to have the courts raise the course to three years. For this reason, while there was a graduating class in 1897, there was none for the year 1898. The class of 1899 pursued a three years' course, and from that time on the department has graduated from twenty-five to thirty students each year. The dean of the department from the beginning has been Hon. John D. Shafer, whose reputation, both as lawyer and judge of the common pleas court, is widely extended over the state. Until his death a few months ago, Thomas Herriott was with the law school from its foundation. Other members of the faculty from the beginning until now are James C. Gray, vice dean; Hon. Samuel S. Mehard, and William H. McClung, Esq. The department has had a high degree of prosperity, and its reputation as a thorough school of law has extended far beyond the boundaries of Pennsylvania. It has had the unique experience of sending a class into a state examination, every member of which has successfully passed, while at least fifty per cent. of the total number at such examination failed to pass. Little effort is made to secure a large body of students. Every effort is made to see to it that the instruction is of the ablest character and that the work of the students comes up to the highest possible standard. The student body numbers over one hundred each year. The law department was the second professional department established by the university itself, the school of medicine being the first. The observatory department and the medical department had been in existence before coming into organic relation with the university.

F. The Pittsburg College of Pharmacy, the Department of Pharmacy of the Western University.

On the 16th of April, 1896, the Pittsburg College of Pharmacy became the pharmacy department of the Western University. The origin of this school dates back to August 12, 1878. Its first sessions were held in the Western University of Pennsylvania building, corner of Ross and Diamond streets, though at that time there was no organic relation. Dr. Francis C. Phillips, of

the university faculty, also filled the Chair of Chemistry in the department of pharmacy. The college prospered exceedingly, and during all of the period from its foundation until its union with the university in 1896 it was more or less affiliated with the university. The dean of the department is Julius A. Koch, Ph. G., Ph. D., and under his wise and energetic direction the department has grown until it is the third largest in the United States, and bids fair to attain a first place in numbers as it has during all its history held a first place in the quality of the work which it has done. The students number over two hundred, and it is not too much to say that not anywhere is there a more thorough institution of its kind. Some years ago a commodious building was erected at the corner of Pride and Bluff streets, where the dental department is housed, and the growth of these departments has been such as to make it imperative that an addition be made to the building, which addition was completed in the fall of 1907. The college is graduating each year from seventy-five to one hundred students.

G. The Pittsburg Dental College; the Dental Department of the Western University.

On April 20, 1896, the first charter was granted to the dental college. At the same time an agreement was made with the trustees whereby this college became the dental department of the university. Its existence and its union with the university are, therefore, simultaneous. At the time of its creation Allegheny county had a population of about 700,000, and within a radius of sixty miles there were 2,000,000 of people. The city of Pittsburg contained schools of all kinds, but young men desiring to study dentistry were compelled to go to Philadelphia or Baltimore. The demand for the dental school was quickly demonstrated by the phenomenal success it enjoyed from the start. Probably no dental college ever organized in America started out with so large a number of students, one hundred and eighteen matriculating the first year. The college made application for membership in the National Association of Dental Faculties, was accepted at the earliest opportunity, and has retained membership therein from that time to the present.

While the college was affiliated with the university from the very beginning, it was not until October, 1905, that the department was transferred absolutely to the university to be under its direct ownership and management from that time on.

The location of the department was in temporary quarters until 1905, when it entered its present home, sharing with the pharmacy department the splendid building at the corner of Pride and Bluff streets, Pittsburg. As already stated, this building is being rapidly outgrown, and the selection of the new location for the university whereon will be gathered all the departments is eagerly looked for by the dental college.

Each year has witnessed improvements in equipment, in teaching, methods, and in an enlarged faculty, and though only eleven years old, the department

has graduated over four hundred students, many of whom have taken honors before the state and army examining boards.

In 1897 the dental department installed the first free dental clinic at the Free Dispensary building, Federal street, Pittsburg. Dr. H. Edmund Friesell is the efficient dean of the department, and under his energetic direction the college is taking high rank among the dental colleges of the land. The number of students is about one hundred and thirty, and this number will increase from year to year. No department has before it a more assured future, and none is able to render better service to the community.

H. The Graduate Department.

Mention has been made of the creation of this department early in the administration of Chancellor Holland. In 1906 new courses were outlined and new rules formulated for this department. The new plan provides for residence work only and requires the equivalent of one year or thirty credits for the master's degree, and the equivalent of three years or ninety credits for the doctor's degree. This department is rapidly expanding and is meeting with very unusual favor. Courses in five departments leading to these degrees are now offered, and these courses will be increased in number as the facilities of the university permit.

It will be seen from the above brief outline that at the conclusion of Chancellor Holland's administration he had brought together into organic form seven great departments constituting the Western University of Pennsylvania. The conception of this idea, while lying in the minds of the committee which framed the curriculum in 1882, waited for its fruition until Dr. Holland assumed the chancellorship in 1891. To accomplish the work as thoroughly as he did, if there had been nothing more, would have given conspicuous glory to the administration of Chancellor Holland. In other parts of the work as well he made large contributions, and it was with the most extreme reluctance that he laid down his office to accept the directorship of the Carnegie Museum, thence forth to give himself more directly to the scientific investigation in which he finds his greatest delight. When he surrendered the chancellorship in the university year 1901-2, the student body was as follows:

Collegiate department	64
Engineering department	124
Medical department	315
Law department	101
Dental department	150
Pharmacy department	118
Total	892

From the resignation of Dr. Holland, in 1901, until the first of January, 1904, the management of the university was committed to the competent hands

of Dr. John A. Brashear as acting chancellor, until a permanent man should be elected. Already, in connection with the observatory department, we have spoken of the spleidid work of Dr. Brashear in securing the money for the erection and equipping of the new observatory. His administration of the university, as a whole, showed a like grasp of the situation and roused new admiration for the splendid abilities of this much-loved and learned man. During his incumbency the university year was divided into semesters instead of quarters as before. Changes in the requirements for admission, some of them operative in 1903, and all to be in force in 1904, were made. During all this time Dr. Brashear was carrying the special responsibility for the observatory and carrying on also his business of manufacturing optical lenses. He found that the triple duties were more than his strength could possibly bear and insisted upon the acceptance by the trustees of his resignation as acting chancellor. This took place January 1, 1904, and from that time until the election of the present incumbent, affairs of the university were administered by Dean Daniel Carhart of the college and engineering department.

On the 26th of May, 1904, Samuel Black McCormick, D. D., LL. D., then president of Coe College, Iowa, was elected as chancellor. Dr. McCormick was a native of Westmoreland county, a graduate of Washington and Jefferson College, in the class of 1880, was admitted to the Allegheny county bar in 1882, and for five years engaged in the practice of law in Pittsburg and in Denver, Colorado. In 1887 he entered the Western Theological Seminary, Allegheny, and from his graduation therefrom became pastor of the Central Presbyterian Church, Allegheny, and in 1894 pastor of the First Presbyterian Church, Omaha, from whence, in 1897, he was called to be president of Coe College. His life-long acquaintance with Pittsburg and his familiarity with conditions in Western Pennsylvania, and especially the fact that for a time in the early administration of Dr. Holland he was an instructor in the university, led to his election to fill the office of chancellor. His acceptance of the election was with the express understanding that at the earliest possible moment a new location in Pittsburg should be purchased by the trustees, and that all the departments of the university should, as soon as practicable, be gathered upon a single campus.

During the three years of the present administration the university has continued its growth in all its departments. The new chancellor entered upon his duties in the fall of 1904. During that university year the number of students was eight hundred and twelve; in 1905-6, nine hundred and eleven; in 1906-7, nine hundred and sixty-six; and in 1907-8, about one thousand and fifty. The entrance requirements have been raised in the college and engineering departments until they are equal to those of the best institutions of the same kind in the country. The group system of studies has been introduced, and the faculty in that department has been multiplied two and one-half times. Every department has shared in the increased number of students, and in the prosperity which is attending the university as a whole. The institution has a

stronger grip upon Western Pennsylvania than it has ever had, is receiving students in every department from the high schools in all the region of which Pittsburg is the center, and is looking out toward the future with hopeful expectancy. The faculty of the university numbers over one hundred and fifty. Its living alumni number nearly two thousand five hundred. Its endowment is about one half million dollars. During the last session of the legislature an appropriation of $250,000 was made to the university for its enlargement. The plans for the future are upon a large scale, and these plans will be carried out as rapidly as circumstances permit.

The chief matter which has engaged the attention of both chancellor and trustees at the writing of this sketch is the selection of a new location in the region of Schenley park, in the city of Pittsburg. From the beginning of the institution, in 1787, until the present time, the university has had its location in Pittsburg except the observatory department and except the college and engineering department, from 1882 to the present time. Now that Pittsburg and Allegheny are united in a Greater Pittsburg, it is fitting that the university should gather its members together into one body, and that in a central place it should find the best possible location, erect new buildings, and enter upon a new career of greatness and usefulness. The city of Pittsburg is one of the great regions of a great nation. Its university will become worthy of the greatness of the community wherein it has for one hundred and twenty years done its work. As the greatest center of applied science in all the world its departments of science and of engineering should be in method, in equipment, and in usefulness the greatest in the world. As a region to which have come people from all nations to make up the ranks of laborers in mills and manufactories, Pittsburg offers clinical advantages to medical students which ought to make the medical department of the university the equal of any in the land. As a city into which has come a great body of college men, not only in the three theological seminaries and in the professional schools of the university, but in the great industrial establishments, the graduate department of the university, which has in the last years received great development, ought to be one of the most important in any university. As the city in which from the beginning of its history great lawyers have been developed, great law courts have been established, the law department of the university ought to find a congenial home and be prospered in the highest degree. Here too it is the expectation of the university to develop very speedily its department of education until a teachers' college shall be established. It is also the expectation to develop the department of language and economics into a school of language and commerce. What is true of the departments mentioned is also true of the college, the dental college, and the college of pharmacy. When these plans are fully developed the university will consist of ten great departments. The realization of all these plans will not be long deferred. The securing of the new location will be the beginning of a new era, the progress of which will be full of glory.

The site which has been selected by the trustees of the university is forty-three acres in extent and forms a part of the historic Schenley farms of Oakland. It lies immediately in front of the Schenley Hotel. The new Memorial building, costing more than a million, now in process of erection, faces the campus of the university. Only a few yards away is the splendid new University Club. Three blocks distant is the magnificent Carnegie Institute, with its museum, its library, its art and its music. A little further distant are the technical schools and the Phipps Conservatory. Other public buildings will cluster around the same spot. The university thus becomes the center of the institutional and educational life of the great city and of a great region round about. As in the coming years the buildings will rear themselves upon this splendid campus it requires no prophet's eye to see the complete realization of the most optimistic hope of the alumni and friends of the institution. Chancellor, faculties, trustees, alumni and citizens are a unit in the purpose to make Pittsburg's university worthy of Pittsburg's greatness. Able and loyal men are guiding the destinies of the institution. Behind it stand the great intellectual, moral and financial forces of the community. The final outcome is absolutely assured.

It is impossible in this sketch to present the names of the various faculties. It is fitting, however, that here should appear the names of those who are at this time guiding the affairs of the university as its trustees. These are as follows:

Joseph Clifton Trees, A. B.
Benjamin Thaw, A. B.
Edw. Balthasar Heckel, M. D.
Daniel Henry Wallace, Ph. B.
Wm. Lucien Scaife, Ph. B., C. E.
Andrew Carnegie, LL. D.
Josiah Copley Thaw, B. S.
J. Chris Lange, M. D.
Maitland Alexander, D. D.
Rt. Rev. Cortlandt Whitehead, D. D.
Wm. Jacob Holland, LL. D., Ph. D.
John Alfred Brashear, Sc. D., LL. D.
Calvin Wells.
George Hubbard Clapp, Ph. B.
Samuel Andrew Taylor, C. E.
Joseph Leonard Levy, D. D.
James B. Eisaman.
Andrew Jackson Kelly, Jr.
Howard Heinz.
Thomas Dorrington Carnahan, A. M.
Hon. James Hay Reed, LL. D.
Cyrus Black King, M. D.
Andrew William Mellon, A. M.
James Henry Lockhart, A. B.
Hon. John Douglass Shafer, LL. D.
Emil August Schaefer, Pharm, D., Ph. D.
Thomas Harlan Baird McKnight.
Thomas Patterson, A. M.
Charles Felton Scott, A. B., Ex-officio.
Samuel Black McCormick, D. D., LL. D., Chancellor.
Hon. George Wilkins Guthrie, Mayor.

CHAPTER XXIII.

Coal and Coke.

Coal is a very important factor in the make up of Pittsburg's immense tonnage. From the Pittsburg district there are shipped each year about forty-five millions of tons. It has been, likewise, an important factor in the marvelous growth and development of the city. The aggregate wealth depends so much on coal that a few words concerning its discovery and the early history of the trade may not be out of place here.

From a publication by Richard Cowling Taylor, in 1848, it is learned that coal was first discovered in the United States by Father Hennepin, the celebrated French Jesuit missionary, in 1669. This discovery was made near Fort Creve Coeur, near Ottawa, Illinois. Little, if any, use was made of it then but the honor of being the first to know of its existence in America is, nevertheless, due him.

In a letter written by William Byrd, of Virginia, bearing date of May 10, 1701, reference is made to Colonel Randolph, Captain Epes, Captain Webb and others, examining a bed of coal, which at times of heavy rains, was uncovered, but which, for the most part, lay very deep in the earth. This was in Virginia, about twenty miles north of Richmond. The same writer, in 1732, describes air furnaces at Massaponax, Virginia and this is, so far as we can learn, the first mention of the use of coal in America, though that is supposed to have been "sea coal," a name given to coal in London, because being then mined only in the north of England, it was carried to London by water and was universally called sea coal to distinguish it from charcoal.

Lewis Evans, in 1755, published a map of the territory now known as the Ohio valley surrounding Pittsburg, in which coal is shown elsewhere, but which shows none at or near Pittsburg, nor indeed any where in Western Pennsylvania. The same is true with a map made by Nicholas Scull, which includes Western Pennsylvania, and which was published in 1759. Yet coal was known or was being looked for in this section of the province as early as 1758, for Colonel Henry Bouquet in instructing Colonel Burd as to the encampment at Fort Ligonier, advises him to examine the country for "sea coal" and instructed him to make charcoal if sea coal could not be found. All

coal save charcoal was then designated as "sea coal." In opening a road from Christopher Gist's plantation to the Monongahela river at Dunlaps creek, Colonel Burd makes several important entries in his diary. He says "encamping about four and a half miles from the river, on September 21, 1759, on Saturday the 22nd they moved forward going westward. On Saturday camp moved two miles to Coal run. This run is entirely paved in the bottom with stone coal, and on the hill on the south of it is a rock of the finest coal I ever saw. I burned about a bushel of this sea coal on my fire."

Many of the early writers refer to a seam of coal on Coal Hill opposite Pittsburg, which took fire in 1765 and 1766, and some of them aver that it burned for sixteen years. In William Scull's map of Pennsylvania, published in 1770, coal is marked in Berks county and also around Pittsburg. In Washington's journal of a tour he made to the Ohio river and westward in October, 1770, under date of October 14, of that year, he says: "At Captain Crawford's all day. We went to see a coal mine not far from his house on the banks of the river. The coal seemed to be of the best kind, burning freely, and abundance of it." Captain Crawford was the unfortunate William Crawford who, after serving as the first judge of the courts of Westmoreland county, was burned at the stake by the Indians of Ohio. He lived at Stewart's Crossing, on the Youghiogheny river, nearly opposite Connellsville. At that time even, coal was being used, somewhat, in Virginia and it was probably shown to Washington, presumably that he would be able to judge of its quality. Later developments confirm his judgment when he decided that Connellsville coal was, "of the best kind."

The Virginia coal mines were the first that were worked in America. They were on the James river, in Chesterfield county, and were first worked in 1750. In the *Virginia Gazette*, of July, 1766, Samuel Davis advertises coal for sale in Richmond, at twelve cents per bushel, and assures his patrons that it is "equal to New Castle coal.' In 1776 Thomas Wharton, Jr., and Owen Biddle, of Philadelphia, were authorized to buy coal from Virginia.

In a very able and exhaustive paper read before the Historical Society of Pennsylvania on January 4, 1875, by William F. Bush, the Penn manuscript is quoted to prove that the Penns were aware of coal in abundance around Pittsburg in 1779. Thomas Penn, in a letter from London dated January 31, 1769, wrote to Governor John Penn saying, "we desire that you order five thousand acres of land to be laid out about Pittsburg, including the town, which may now be laid out, and I think from the situation it will become considerable in time; and that the land may be laid out to Colonel Francis and his associates and other gentlemen of whom I wrote you, as contiguous as may be and in regular angled tracts if possible." Following this, on May 12, he wrote as follows, respecting the same survey: "I would not engross all the coal hills, but rather leave the greater part to others who may work them." In 1784 the Penns still retained the large tract known as the "Manor of Pittsburg" and sold the priviledge of mining coal in the "Great Seam" as it was

called, to any one on the payment of thirty pounds for each mining lot, a lot extending back to the center of the hill. This was really the beginning of the coal trade in Pittsburg and was the first in Western Pennsylvania.

Coal was shipped eastward from Western Pennsylvania more than a century ago. Samuel Boyd patented a tract of land in Clearfield county, in 1785, and in 1804 sent an arkload of coal down the Susquehanna river to Columbia, in Lancaster county, a distance of two hundred and sixty miles. The "fuel was a matter of great surprise," to the people of that county. In 1828 the Allegheny Coal Company sent coal from Clearfield county to Philadelphia. It was taken down the Susquehanna river to Port Deposit, and thence down the Chesapeake bay and up the Delaware bay to Philadelphia.

Sir Charles Lyell, the great English geologist, perhaps the ablest of his day, came to Western Pennsylvania and particularly to Pittsburg, in April, 1846, and made a special study of the geological formations of the Ohio valley. His own words concerning his discoveries in this region are most expressive of its wealth. "I was truly astonished, now that I had entered the hydrographical basin of the Ohio, at beholding the richness of the seams of coal which appeared everywhere on the flanks of the hills and at the bottom of the valleys, and which are accessible in a degree, I never witnessed elsewhere. The time has not yet arrived when the full value of this inexhaustible supply of cheap fuel can be appreciated. To properly estimate the natural advantages of such a region, we must reflect how the three great navigable rivers, such as the Monongahela, Allegheny and Ohio intersect it and lay open on their banks the level seams of coal. I found at Brownsville a belt ten feet thick of good bituminous coal commonly called the Pittsburg seam breaking out in the river cliffs near the water's edge."

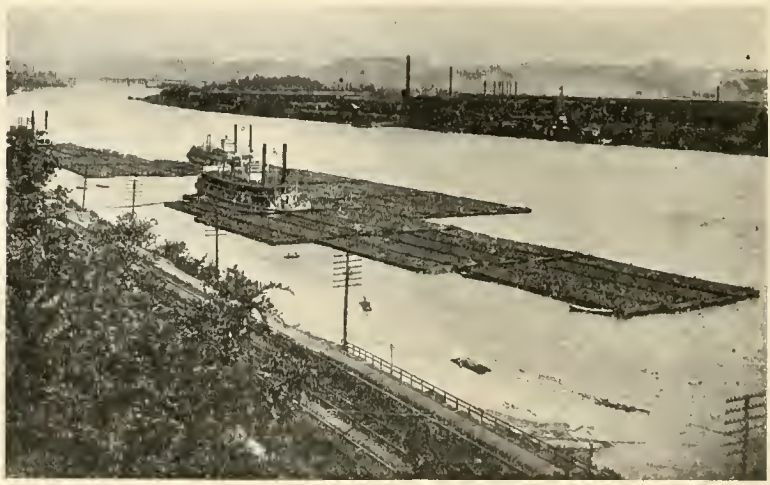
The shipment of coal from the Pittsburg region prior to 1852 was necessarily by water and was therefore confined to the Ohio river almost entirely. The early writers who refer to the coal near Pittsburg had no idea of its value but regarded its abundance as a curiosity worth mentioning. In competition with wood as a domestic fuel it was not highly regarded, for the former was brought down the rivers in abundance, was cleaner and afforded a more cheerful light to sit by at night than coal.

Only when the railroad building era of the early fifties came, did the coal industry as we know it now begin and even then it was confined to fields which were in close proximity to the main roads. The modern idea of building a branch railroad to a coal field was not thought of till about 1870 when it, in many instances, became necessary.

The early efforts toward bringing coal to market by water were very discouraging. While the flow of water was sufficient to transport it in time of freshets, the river-beds were shallow and full of rocks, so that the arks laden with coal and other products had perilous adventure and wrecks were numerous, hence another way must needs be discovered and in time the canal system was employed to great advantage.

Supplying the towns on the Ohio and Mississippi rivers with Pittsburg coal was first attempted shortly after the close of the Revolutionary war but the shipmentes were of no special value. Prior to about 1850 all the coal shipped westward came from Pittsburg and was floated down the Ohio river in large flat-bottomed boats with the spring and fall freshets, the average boat holding about 15,000 bushels. These boats were usually lashed in pairs and boats were sold and broken up at the point of their destination. In 1850 steam tugs were introdúced. A writer of those days describes their running as follows:

"In the early days of flat-boats, a safe return even when the venture had not proven one of financial profit, was a grand event and the occasion of much joy. The business had a special class who sought it for its adventure and



COAL BARGES ON THE OHIO

dangers, as much as for the profit there might be in it. The river pirates met the flatboatmen of that early day, a class ready, eager and willing for a fray, a class which like the ranchers of the western plains, accounted a trip indeed tame and spiritless if unattended with danger. They were rough and ready, soulless and care-free. Dreamily floating down the Ohio river they whiled away with song and dance the lazy hours." The boatman's horn, more musical than the steamboat's whistle, waked the echoes from distant hills. It was a romantic life befitting the grand scenery and rude time. Ninety days on a slowly moving flat-boat, the scenery ever changing, but ever wild and beautiful, was a thing never to be forgotten. It is now different for one to realize that these flat-boats, the queerest crafts that ever floated on any stream in America, were the only means of transportation from the headwaters of the Ohio to New Orleans. The leisure-loving, deliberate, slow-moving flat-boat was fast enough for its day and the people. There was luck in its leisure."

The introduction of steam changed the whole condition of river traffic. Under its powerful impulse the river was rendered navigable up as well as down

stream. The change was a very important one for the upper Ohio valley. It was the first outlet the great coal fields had. Since 1811 when the "Enterprise," the first steamboat, went down the river and came back part of the way, the coal trade has steadily increased. Though the railroads have taken the trade from the rivers, they have not by any means monopolized the business. This is demonstrated every day at the Pittsburg wharf. On one day, June 24, 1903, there were 399,350 tons of coal shipped by river from the Pittsburg wharf. This was the largest shipment ever made in the history of the river trade.

The coke industry is closely allied to the coal industry. Neither is purely a Pittsburg product, but both are produced largely by Pittsburg capital which is invested in the Pittsburg district. Coke has done more than any other product toward making Pittsburg an iron city. An account of the growth of the industry is therefore very important, if the reader would know the real causes of Pittsburg's true greatness and appreciate the long continued afforts that were put forth to bring the industry up to the present stage of perfection. Its manufacture and sale has given Southwestern Pennsylvania and particularly Pittsburg a name throughout America. It is probable the F. H. Oliphant was the first in this country who manufactured it, though in small quantities, and successfully used it in smelting iron in the Fairchance Furnace in Fayette county, in 1835 or 1836. The Franklin Institute, in Philadelphia, in 1835, offered a gold medal as a premium to the person who would manufacture during the year the greatest quantity of iron from ore, using no other fuel than bitumious coal or coke, the medal not to be awarded for any quantity less than twenty tons. The reader will recall that charcoal was the fuel used at that time in smelting ore. Coke had been made in England a century before, but was always used in connection with charcoal. Isaac Meason had also used coke in a furnace near Brownsville, but not with success. The Internal Improvement Society in 1825, sent William Strickland to England to learn more of the use of coke in making iron. Timber in immense quantities was getting scarcer and new methods must be devised. The abundance of coal in Western Pennsylvania and the difficulties in procuring charcoal and in transporting it to the furnaces, for it must be remembered that the timber near a furnace was soon cleared away, induced thinking men and ironmasters generally of that day to investigate the practicability of using coal or a product from it, in place of charcoal. An Englishman named John Beal on May 27, 1813, had offered his services to blast furnace men, who were then smelting ore by charcoal, at, as he said, a great disadvantage. He proposed to instruct them in making coke from coal. His advertisement said: "The advantage of using coke will be so great that it cannot fail becoming general if put into practice." Beal was afterwards engaged in the iron business up the Monongahela river but with a meager success.

On October 3, 1836, F. H. Oliphant wrote to the Franklin Institute claiming the gold medal offered in 1835, saying that he had made over a hundred tons of metal in the Fairchance furnace, by the exclusive use of coke. But Oliphant afterwards returned to the use of charcoal.

In 1841 William Turner, Sr., Provance McCormick and James Campbell employed John Taylor, a stonemason, to build two ovens for the purpose of manufacturing coke. These were built on Taylor's land on the banks of the Youghiogheny river, a few miles below Connellsville. The ovens were very small, only made to hold between sixty and seventy bushels of coal. Several experiments were made with them during the summer of 1841 but the results were very unsatisfactory, for they doubtless knew but little about the business. The want of draft, they learned by experience, was one of the causes of their failure. Gradually the obstacles were somewhat overcome and finally, even from these ovens, a fair quality of coke was produced. In the winter of 1842 they loaded two coal boats, each ninety feet in length, and when the high waters of springtime came, they floated them down the river to Cincinnati in search of a market. There were foundries there but their owners were unwilling to invest in it, though it was carried about the city in sacks and offered at low prices. After two or three weeks one boat load containing about eight hundred bushels and a few bushels from the other, were disposed of in small lots at about eight cents per bushel. Then a foundryman named Miles Greenwood, of Cincinnati, offered to take the remainder at six and one-fourth cents per bushel, providing Mr. Campbell, who had gone down with and had charge of it, would take a patent flour mill in part pay. This offer was accepted and the flour mill was shipped to Connellsville. It proved to be of no value and was finally sold to a mountaineer for $30.00.

Greenwood sold some of his coke to a foundryman in Dayton, Ohio, named Gebhart, who discovered its good qualities and a year later came to Connellsville to purchase two boat loads to be shipped to Cincinnati. But McCormick and Campbell had not forgotten their bitter experience of the year before and refused to negotiate with him. They did, however, lease their two ovens to Mordecai Cochran and his two nephews, who began to make coke in 1843. They were more successful, for in the two or three years they made about thirteen thousand bushels of coke, floated it down the river and sold it to the same foundryman, Miles Greenwood, for seven cents per bushel. Richard Brookins also opened a mine near by and erected five ovens in which he began to make coke. He also made coke on the ground by covering it thoroughly with earth so as to exclude the air while it was in the process of roasting. This primitive method was successful, but it was at a great waste of coal. In 1844 Colonel A. M. Hill, who, like Cochran, afterward became prominent as a coke producer, purchased coal lands in the same locality and built seven ovens of a much larger size than the former ones, his holding about one hundred and sixty bushels each. From these he had much better results. Stewart Strickler built perhaps four ovens in 1850 near those operated by the Cochrans, and sold their product to him. A few others were also built in the same region so that in 1855 there were about twenty-five ovens in that section. When the Pittsburg & Connellsville, now the Baltimore & Ohio railroad was completed to Pittsburg, a great impetus was given to the coke business, for

prior to this its shipment depended on the high waters in the Youghiogheny river. Graff, Bennett & Company, who were then operating Clinton Furnace in Pittsburg, made a test of the Connellsville coke and found it perfectly suited to their purpose. In 1860 they contracted for a daily supply of coke from these Fayette Works, as they were then called. There were in 1860 about thirty ovens and the next few years added a few ovens near Dawson. Then came a more important plant built by Daniel R. Davidson of Connellsville, which was located on the ground now occupied by the Davidson works of the H. C. Frick Coke Company. The manner in which these ovens have multiplied will be shown by statistics later on.

Coke is produced from a soft quality of coal by the simple process of roasting it for from forty-eight to seventy-two hours, with the air almost entirely excluded from it while the burning is going on. At the proper time water is poured into the mouth of the oven on the burning mass. About one thousand gallons are sufficient for an ordinary oven. Immediately after this the material is taken from the oven and is the coke of commerce. For foundries and other high grades of work, seventy-two hour coke is used, while a coke suitable for furnaces may be made in forty-eight hours or in less time even, When the oven is first fired the coal is lighted by means of wood or burning coal, but when charged afterwards, if charged promptly after the coke has been drawn, the coal is ignited by the heat retained by the walls of the oven from the previous charge. The cavity of the oven is wide at the bottom with the sides gradually converging toward the top. Originally each oven was built separate and their outside appearance, having nearly the same shape as the cavity within, somewhat resembled an old fashioned bee-hive such as our ancestors made of twisted straw. From this fact they were called bee-hive ovens, a name which has since to some extent clung to them, though they no longer have an oval shape on the outside. The first ovens of the coke region have long since been torn away and the mortar of their joints has crumbled and mingled again with the earth; but the fires lighted in them with a spark from the blacksmiths forge burns now in thousands and thousands of ovens, has multiplied millions of capital and supports one of the chief industries of Western Pennsylvania.

The Connellsville coke region is a name given originally to a coal field about forty miles long and three miles wide, though it was much narrower in many places. This belt extends northeast and southwest across Fayette and Westmoreland counties. The region in which coke is now manufactured is much larger, though the coal from the original field is the best coking coal yet discovered anywhere in the United States. It is of a peculiar quality and is entirely suited to the manufacture of coke. It is soft and porous, yielding easily to the miner's pick. It is remarkably free from sulphur and is dumped into the coke ovens as it is dug from the mines. Most coals, if they are convertible into coke at all, must be washed to rid them of sulphur and other impurities, and this is a very expensive operation. Because of this remarkable freedom from sulphur and other impurities and because of its high percentage of carbon, its

hardness and consequent ability to bear heavy burdens of ore or iron in the furnaces and foundries, the coke from the original Connellsville Coke Region, has been proved by many years of experience to be the best fuel of its kind yet discovered for the manufacture of iron and for the smelting of all ores. It has driven charcoal almost entirely from the market and is without a serious competitor in the iron industry in America. Coke from this region is regularly shipped to California to those who smelt gold and silver ore that is dug from the Pacific slope. It is sent to all parts of the ore mining West. When taken from the oven it no longer has the appearance of coal. It is very much harder; it is greatly reduced in weight; it has a ringing sound when struck; it is of greyish color and is full of small cells or cavities. The coal from which it is made lies from sixty to one hundred and fifty feet beneath the surface, along its longitudinal axis. As it approaches Chestnut Ridge it bends rapidly and then abruptly to the surface and crops out along the western slope of the ridge. It is the same vein of coal which, in other sections of Pennsylvania, is used for fuel in houses and for steam making machinery. Why this comparatively small basin should be purer and make better coke than other coals in the same locality, scarcely separated from it, is a problem which geological investigations have not yet solved. Nor can it be used for the smelting of ore or iron until it is first made into coke. When put into a furnace and the necessary limestone and ore or iron is put on it, it is so soft that the weight above crushes it down, so that it will not burn since the blast cannot penetrate it. Moreover the sulphur in it is sufficient to mix with and damage the iron produced. By the coking process, the sulphur nearly all passes out, and the product becomes hard enough to bear the immense weight of the ore and limestone which must necessarily rest on it in the process of smelting. The coke being full of small cavities, gives the air a passage through it, and thus an intensely hot fire can be made by its use.

The coal field from which a fairly good quality of coke can be and is being made, is much larger than it was originally supposed to be, and future discoveries may still further extend its limits. At present several Pittsburg companies are manufacturing coke successfully in the northern part of Ligonier valley, and their products find a market where Connellsville coke has been heretofore used entirely. A fairly good coking coal is also found in other parts of Pennsylvania and in West Virginia.

In 1871, near Larimer Station, Andrew Carnegie experimented in making coke from fine or slack coal from mines near by. At first the mound process, that is, piling the coal in a long earth-covered mound, through which ran a tubular ventilator for the purpose of giving a sufficient draft to the fire, was used. The experiment proved that slack coal could be thus utilized, and accordingly eighty ovens were constructed to which were added forty the year following. With these ovens, Mr. Carnegie produced a reasonably good grade of coke, and continued to operate them till 1900. Then the demand for slack coal for steam-making became so great that it was no longer profitable to use it in making coke, and the ovens were abandoned.

Their crumbling ruins yet remain and are pointed out as an evidence of Mr. Carnegie's early business sagacity and of his connection with the coke industry when it was almost in its infancy.

Water is a great barrier in the mining of this coal. Without the constant use of pumps, the mines would soon fill up, for natural drainage at such depths is out of the question. Constant pumping, day and night, adds greatly to the cost of coke production, and although water for the purpose of cooling the molten coke is necessary, and is poured into the ovens in great quantities, the water pumped from the mines cannot be used for this purpose, because of the sulphur it contains, and because of its many other impurities. These leave a trace in the coke if poured into the molten oven, and consequently only the purest water must be used. This is furnished by a system of water works, the construction of which alone is often attended with great expense.

The real value of the coking coal in Southwestern Pennsylvania is almost beyond comprehension. The region seems small when compared with the acreage of other fields, yet the coal in this region that is known by special geological examinations, assures us beyond doubt that at the present rate of consumption, it cannot be exhausted by our generation. It is usually estimated that an acre of coal eight feet in thickness, will make about five thousand tons of coke. There are in the Connellsville region proper, about 120 square miles, capable of producing over four hundred millions of tons. If the coking coal were confined to this region it would soon be exhausted, for the output in 1905 was 17,896,526 tons. But the field, as we have said, is much larger than it was originally supposed, and even in the original basin there are three separate strata of coke-producing coal, the lower vein being often as much as 500 feet below the surface. In some places the lower strata is over nine feet in thickness, and none of them are anywhere less than six. The upper vein alone was considered in the above calculation.

In most of the mines the work is done by improved electric machinery, both in the coke regions and elsewhere in the Pittsburg district. The same power is used in pumping, in drawing the coal and hoisting it to the surface. There are certain ramifications, however, in almost every mine, which cannot be well reached by electric appliances, and in these the hauling is done by mules, after the manner of the early days in mining.

The development of the coke industry was very meager at first, and it has acquired nearly all of its commercial importance since 1870. The census of that year shows that 92 per cent. of the coke made in the United States was made in Pennsylvania, and practically all of it was made in the Connellsville region. When the panic of 1873 came there were 3,673 ovens in this district, and for five years there were no new ovens built. In 1878 the coke business revived with other industries, and in 1880 there were 6,267 ovens completed, and there were about eleven hundred in process of construction. At that time Pennsylvania produced 84.2 per centum of all the coke produced in the United States. The census of 1900 credits the Connellsville region

with producing $17,128,112 worth of coke. It also shows that in that year Pennsylvania had eighty-nine coke establishments employing 9,283 men, and that the value of the product was $22,282,558. The census of 1890 showed that our state had 5,855 wage earners employed in the coke industry, and that the value of the product was $10,415,628. The figures of 1900 show, therefore, an increase of 113.9 per centum in ten years. In 1899 the average number of car loads of coke shipped from the Connellsville district was 1,676 per day. In 1906 it was 2,385 per day, or 745,274 cars during the year. The cars would make a solid train reaching from Pittsburg to San Francisco and back again. The output in 1906 was nearly 20 millions of tons. It was moreover 90 per cent. of the coke produced in Pennsylvania, and was 64 per cent. of all the product in the United States.

The price of coke has fluctuated a great deal in the last 20 years. In 1901 it was sold as high as $6.00 per ton, and as low as $1.30 per ton. The number of ovens, the tons shipped, the average price and the gross revenues of the coke region from 1880 to 1907 inclusive, are given in the following tabulated statement, taken from the *Connellsville Courier,* the highest recognized authority in the coke industry in the United States:

YEAR	Total Ovens	Tons Shipped	Av. Price	Gross Revenue
1880	7,211	2,205,946	$ 1 79	$ 3,948,643
1881	8,208	2,639,002	1 63	4,301,573
1882	9,283	3,043,394	1 47	4,473,889
1883	10,176	3,552,402	1 14	4,049,738
1884	10,543	3,192,105	1 13	3,607,078
1885	10,471	3,096,012	1 22	3,777,134
1886	10,952	4,180,521	1 36	5,701,086
1887	11,923	4,146,989	1 79	7,437,669
1888	13,975	4,955,553	1 19	5,884,081
1889	14,458	5,930,428	1 34	7,974,663
1890	16,020	6,464,156	1 94	12,537,370
1891	17,204	4,760,665	1 87	8,903,454
1892	17,256	6,329,452	1 83	11,598,407
1893	17,513	4,805,623	1 49	7,141,031
1894	17,834	5,454,451	1 00	5,454,451
1895	17,947	8,244,438	1 23	10,140,658
1896	18,351	5,411,602	1 90	10,282,043
1897	18,628	6,915,052	1 65	11,409,835
1898	18,643	8,460,112	1 55	13,113,179
1899	19,689	10,129,764	2 00	20,259,528
1900	20,954	10,166,234	2 70	27,448,832
1901	21,575	12,609,949	1 95	24,589,400
1902	26,329	14,138,740	2 37	33,508,714
1903	28,092	13,345,230	3 00	40,035,906
1904	29,119	12,427,468	1 75	21,748,069
1905	30,842	17,896,526	2 26	40,446,149
1906	34,059	19,999,326	2 75	54,998,146
1907	35,697	19,029,058	2 90	55,184,268

CHAPTER XXIV.

STREET RAILWAYS.

Horse Cars—Cable Cars—Electric Cars.

The history of the street railways of Pittsburg, in common with most large cities of the country, may well be divided into three periods, and each period has employed a different system of surface street railway, the horse car, cable car and electric car. As complete as is the present system, on account of the rapid growth of the city and its environments, plans are already being made for either overhead or sub-way lines which shall more nearly meet the requirements of the coming years.

Up to the summer of 1859 the only means of going from one part of the city to another, was by means of hacks, cabs and omnibus lines, the latter having grown to be a very large and lucrative business. By an act of the legislature passed in the winter of 1858-59, a charter was obtained for the building of a horse street car line in Pittsburg. On March 26, 1859, the city council passed an ordinance permitting such a line to be laid on the streets of the city, under certain restrictions, which have been modified from time to time. The company organized for this purpose, was known as the Citizens' Passenger Railway Company. By act of legislature, this road was to begin at the intersection of Market and Fifth streets, thence to Liberty, across Liberty to Cecil alley, thence to Penn avenue, thence to the Greensburg and Pittsburg Turnpike road, and from that point to the suburbs. This company was incorporated with a stock of two thousand shares, each valued at fifty dollars. Among the incorporators were: James Verner, Alexander Speer, Richard Hays, William Darlington, Joshua Rhoades and Nathaniel Holmes.

Another line was soon opened up from Pittsburg to Birmingham, and still another from Pittsburg, through Allegheny City, to Manchester. To these trunk lines were added numerous feeders, or shorter branches, all of which provided a good transportation service for passengers from the down-town district.

That the horse car system was a great innovation may be seen from the following editorial in the *Gazette* of January, 1859, published while the bill

for a charter for this street railway was under consideration by the state legislature. By reason of much prejudice, the measure had to be encouraged and agitated by the more enterprising newspapers of the city. This item reads:

"In a system like this the horses travel slowly and evenly, and as anyone knows who has ever ridden upon such cars in Boston, New York or Philadelphia, it is hardly necessary to make a stop to permit passengers to alight. The car itself is about the size of an omnibus. We think, that to persons of limited means, who find it too expensive living in the city, this convenient mode of travel will give them special advantages, and will allow them to live in sunshine and pure air, at the same time get cheaper rents."

The ordinance under which this system was installed, stipulated that not more than five cents fare should be charged from Pittsburg to Lawrenceville. The first car for this line arrived from the factory in Philadelphia, August 5, 1859, and attracted much local attention. It was the subject of a minute description in the newspapers of the city, and it had its trial trip August 6, when about two dozen prominent citizens were invited to ride on it and enjoy "rapid transit" (?). Shortly after it was put to use a newspaper of Pittsburg remarked: "Travel on the new street cars is indeed surprising. The omnibus lines still run and yet the cars, four in number, are running full both ways, usually until ten in the evening."

Upon the opening of the great suspension bridge from the foot of Sixth street, built by the famous Roebling in 1860 (the present "Thaw Bridge"), the street cars crossed over to Allegheny City. While the city was small, this mode of travel was adequate to the demands, except on special occasions, but as the city increased in size and population, better facilities had to be employed. The building up of numerous surburban towns demanded a more rapid way of getting to and from the residence part to the business sections of the city. This primitive car line, an improvement over the older 'bus system, was superseded in many of the more important business streets by the cable system, which was first adopted in the early eighties. The first of these lines was laid in conduits, along Penn and Fifth avenues, to East Liberty. The old horse car lines had been operated by various companies, at different times in their history. The first of these corporations to adopt the cable system were the Central, Citizens', Pittsburg, Oakland and East Liberty companies. In 1890 the six car companies operating in Pittsburg were: The United Traction, West End Traction, Birmingham Traction, Schenley Park, Highland Traction and the Suburban Traction, which at that time had all adopted electricity as a motive power for propelling their cars.

The cable car system, which was the next in advance of the horse cars, was indeed a marked improvement, both in carrying capacity and speed. The long, well built cable cars, or "grip-cars," as they were sometimes styled, were propelled by means of a huge wire endless cable, laid in a channel beneath the street surface. It moved continuously over large pulleys, and to

this ever-moving, endless wire cable, the car was attached, at the will of the operator, by means of a lever which engaged and disengaged the set of "grippers" attached to the bottom of the car, and which moved between iron plates, forming a slot along the center of the track. The cable passed over and immense wheel which was propelled by means of large steam engines at a central power station.

The total capital of the six companies operating street cars in Pittsburg in 1890 was $47,785,000, with a bonded indebtedness of $16,000,000. The total number of hands employed was 3,800; miles of trackage, three hundred and thirty-seven.

The first electric street cars made their appearance in the United States in 1886, and by the close of 1888, there had been constructed but about forty-eight miles of such car lines. At the annual convention of the American Street Car Association, held in Washington, during the year 1888, a member of that convention became weary at the reading of a paper on "electric roads," and called a halt on the speaker by remarking: "It is but a waste of time to talk of this new-fangled electric system."

The same gentleman was president of the same association, which held its meeting at Minneapolis, in 1890, and there remarked: "This will be the last convention at which the question of horse street cars well ever have any serious consideration."

The cable system obtained and did excellent service in Pittsburg until 1890, when it was superseded by electric propelled cars. The cable system did not admit of so many changes and sharp turns as was necessary for the multiplied branch lines and short feeders. The matter of switches from one line to another, was not practical, and the whole plan was fraught with much expense.

The first electric cars were run in Pittsburg in 1890 by the Duquesne Traction Company, which was soon followed by all the companies. The speed made by the horse car was rather less than over five miles per hour. The present system readily runs its cars fifteen miles per hour on fairly long runs, and twenty miles on the longest runs.

With all that may be said against capital and its greed, the fact still remains, had it not been for the large profits to be made by investments in street car lines in Pittsburg, as in all other cities, the populace would still be making their way about from city to surburb by means of horse cars, or wagons. No sooner did the demand for better and more rapid transit present itself, than bankers and other capitalists came to the rescue and freely invested large sums for the construction of these surface lines, which now cover nearly every part of the city. While this money (reaching into the multiplied millions) was not invested to accommodate the people but for the great interest it paid the investor on his capital, on the other hand, it was of great service to all, and is generally duly appreciated. The noted East End, with its palatial mansions, together with the score and more of distant

suburbs, would not be a part of "Greater Pittsburg" were it not for this rapid transit system, which affords a car at almost every street corner in the incorporation, every few minutes, day and night.

Soon after the introduction of electricity as a propelling power for street cars, the various companies either merged with others or disposed of their stock, until the organization known as the Pittsburg Railways Company came into control of all the street car line interests in the two cities. At present this corporation either owns or leases all the lines of surface road within the city, and give a most excellent service, not alone in the city proper, but to outside towns and cities, including Avalon, Etna, Bellevue, Vernon, Oakmont, Wilkinsburg, Wilmerding, East Pittsburg, McKeesport, Braddock, Homestead and Coraopolis. The longest of these lines is the one running up the Monongahela river to a point two miles above Allenport, a distance of forty-four miles. The total mileage of this company is now about five hundred, and it has other lines projected which will soon be constructed. The system is operated by electricity, generated by steam power, at six immense power plants. About 1,700 cars are owned, fully one-half of which are in daily use. Over four thousand men are employed in the various departments of this company's service. For the year ending March 31, 1907, the total number of fares collected was two hundred and three million, as against one hundred and ninety million in 1905.

The changes in local passenger traffic have been great since the first electric cars were run, in 1890, over the Duquesne Street Railway Company's lines, which were contracted for April 1, 1890,—a twenty-five mile lot of trackage—which was to be completed by October of that year. The president of the first line to operate the electric system was the late Hon. Christopher L. Magee.

But even with all these modern methods of rapid transit, the rapid growth and wonderful extension of Greater Pittsburg has almost reached the point where another innovation must be inaugurated in order to handle the tremendous traffic, both local and suburban. The surface roads have covered almost every street with their net-work of tracks, and the topography of the city will scarce admit of more such lines. The only additional facilities which now seem feasible, is that of either a sub-way, or elevated railway, which systems are now being agitated with enthusiasm by men who are abundantly able to construct and operate either.

Another division of the street passenger service in Pittsburg, is that known as the inclined roads, which run from the level of the city proper to the numerous high elevations which overlook the city. The first of these inclined roads, over which cars were run by means of endless cables, operated by stationary engines, was the one built in 1870, and connected West Carson street with Grand avenue, on Mount Washington. In 1882 this line was made a double track, one for passengers and the other for freight traffic. Its total length is 642 feet. A second inclined road was constructed in 1871, to the top of Mount Oliver; this has two tracks, also. Its total length is 1,600 feet.

with a perpendicular height of 377 feet. The third one of these roads was built at Castle Shannon, running 2,112 feet from Carson street, near Third avenue, to Bailey avenue. This was re-built and greatly improved in 1891. About the same date one was constructed from West Carson street to Duquesne Heights, it being 709 feet long. In 1882 another was built from Liberty avenue to Cliff street; this has double trackage. In 1886 the St. Clair incline from South Twenty-second street, to Arlington Heights, was built, it also having two tracks, and is 1,320 feet in length. In 1887 the Nunnery Hill incline was built. This leads from Federal and Fairmount streets. A more recent one is the Fort Pitt incline, from Second avenue to Bluff street. This is 2,640 feet long, with a perpendicular height of 375 feet, and has double trackage, carrying both freight and passengers. At Eleventh and Breed streets, one is operated to Knoxville, and this is 2,000 feet in length. Another extends from Sarah to Taggert streets in Allegheny, to Clinton Park, this being of the double track type, too. Troy Hill incline starts from Butler plank road and ascends Troy Hill, a perpendicular height of 370 feet. Still another runs from Seventh street to Ridge street. On many of these inclined railways the electric cars are run under a lease, thus saving many transfers.

With all of these various lines of surface street car tracks, which diverge in all directions from the city, passengers have an excellent service in getting to and from all surrounding boroughs and cities. Connecting as they do with other companies' lines, one may easily reach almost any point in Western Pennsylvania by electric lines. By reason of this rapid transit system, many additions to Pittsburg and numerous out-lying boroughs have been built to places of much importance. They have undoubtedly been the salvation of the rural districts.

It is safely estimated that the present amount invested in street railway property in Pittsburg is sixty million dollars.

CHAPTER XXV.

Police Department.

There were but few policemen seen in Pittsburg during the first quarter of last century. The first public officer of that character was the constable of Pitt township. He and the sheriff of the county were the only officers who were empowered to arrest wrongdoers. Up until the formation of Allegheny county, in 1788, it was one of the constable's duties to make a report or return of the condition of his district at each successive term of court, and the old minutes show instances of the Pitt township constable being fined for non-attendance at Hannastown. There were but few other duties for the officer to perform. In 1794, when the village of Pittsburg became a borough, the town no longer depended upon the township constable, for its peace officer, but supported both a constable and a high constable itself. But few arrests were necessary in those days. Drunkenness was not looked upon with the disfavor of the present age. The constables served civil processes, collected small amounts due, and had other employment which mainly occupied their time. The borough was bounded by Grant and Eleventh streets and the rivers, and it did not require much time for even one officer to pass over the entire town. Criminals could not secret themselves so easily as they can now, and the means of getting away from the authorities were extremely limited. Crimes against personal property were fewer then than now, for there were few valuables in a community that a thief would care to steal. When the borough was incorporated into a city on March 4, 1816, the act incorporating it authorized the authorities to establish a police force, but there was none established for some years afterwards. The act limited the city taxation to five mills on a dollar, and the corporation could scarcely have paid a police force, even if one had been required. The city authorities did, however, pass an ordinance on August 24, 1816, establishing a night watchman, but soon found they had no money with which to pay him. They accordingly repealed the ordinance, and for some years the city slept in darkness without the benefit of police protection. The incorporating act conferred a general power on the councils in the following language, namely: "To make, order, constitute and establish such and so many laws, ordinances, regulations and

constitutions as shall be necessary or convenient for the government and welfare of the city, and the same to be enforced, put in use and executed by constables and other proper officers who they shall have power to appoint." Section fourteen of the same act indicates clearly that a police organization was not contemplated immediately by those who framed the bill, for it provided that any person having committed an offence within the city, and who should be in hiding in the city or in the neighborhood, should be lawfully arrested by a constable on a warrant under the seal of the mayor, recorder or alderman, and that the offender should be brought before the party issuing the warrant, if found anywhere in Allegheny county. The constable was the officer elected annually by the people, and the act did not contemplate a special police. The clause was important, not as conferring a power to arrest on the officer, but rather enforcing him to perform such duties and, therefore, to allow the new city to avoid for a few years the expense of a regular police force. Old appropriation ordinances indicate that the high constable of the city was paid $200 per year, and that there were four ward constables, who were to maintain the peace and good order of the city, and protect its citizens from assaults, mobs, disorderly persons and criminals of all kinds. By the same act the power to appoint police officers was vested in the councils and not in the mayor. This power continued with the councils until 1857, when an act was passed empowering the city "to provide for an efficient day and night police." The supreme court of the state construed this clause to mean that a police force for Pittsburg should be appointed by the mayor and not by the councils. (See Second Harris, page 177.) As early as 1842, Alexander Hay, mayor of Pittsburg, attempted to appoint a night watchman, thus asserting this power as vested in the mayor and not in the councils. Andrew Wylie, Jr., afterwards judge of the district court at Washington, D. C., was then solicitor of Pittsburg, and took Mayor Hay into court upon a writ of mandamus, and the matter was decided against the mayor. In 1831 there was one high constable and three constables. The appropriation order of that year appropriated $200 for a high constable and $600 for the other three constables. Earlier ordinances in the same way indicate that there were but two constables, while the ordinance of 1837 indicates that there were four. In 1840 the number was increased to five in addition to the chief constable, and this number was apparently not increased until 1851. This applies to constables and not to policemen. The original form of government of Pittsburg, as set forth in the act of March 4, 1816, was modeled after and very like that of Philadelphia. That city authorized its mayor to appoint a night watchman as captain and as many night watchmen as the mayor might think proper. To imitate Philadelphia further the ordinance of Pittsburg creating a night watch was passed on August 24, 1816. The power conferred on the Pittsburg mayor was limited too, for the ordinance restricted the expenditure on the night watchmen to $300 per year, which prevented a flagrant abuse of the power. The Pittsburg ordinance defined the duties of the night watchman

directing him to apprehend all drunkards, vagrants, disorderly persons and criminals, and it also instructed him to call out the hours and the state of the weather every hour from ten o'clock at night until four o'clock in the morning in the summer time, and until six o'clock in the morning in the winter time, so that the people of the city might know how rapidly the night was passing, and be duly apprised of any changes in the weather. This hour-calling practice was long continued, and is well remembered even yet by some of the older citizens. An elderly lady has told the writer that a common way of knowing that a new watchman had been put on duty was by the awkwardness he displayed in announcing the hour and the probably inclement condition of the weather. Another and perhaps more important duty of the night watchman was to awaken the sleeping citizens when a fire broke out. Most new towns are built hurriedly and many of the houses are of extremely combustible material, so that there is an almost constant dread of fire, and particularly in the night time. Pittsburg was no exception to this rule, and it was, therefore, particularly enjoined upon the night watchman to rouse the citizens within his district, and particularly those known to belong to a volunteer fire company and those in charge of fire engines, and to make all kinds of noises that would spread the alarm as rapidly and as widely as possible. Perhaps no alarm came with so much terror to the Pittsburgers of early days as the fire alarm given by the night watchman, and the stress laid upon him in that direction by the ordinance shows that the pioneers had frequently experienced the horrors of a fire at midnight. There were also "watch houses" built during the period that Pittsburg was patroled by night watchmen. They were small structures, perhaps four by five feet, and it was intended that the night watchman could temporarily imprison in them any one whom he might arrest, until the culprit could be taken before the mayor or other proper officer. Afterwards a central watch house was established for the same purpose, and the old watch houses were used by the watchmen when not particularly engaged, many facetiously claiming that the watchmen slept in them most of the night. The first night watchman, whose position was created by the city ordinance of August 24, 1816, was released from further service on March 5, 1817. An ordinance passed on January 3, 1831, empowered the mayor to appoint night patrolmen, and did not limit the number, while by an ordinance of March 24, 1836, the year in which the city first elected its mayor, limited the force to one captain, two lieutenants and sixteen patrolmen or watchmen. An ordinance of March 9, 1842, reduced the number of watchmen to eleven, and limited their pay to $26 per month each. In 1843 the number was increased to twelve, and in 1850 the lieutenants were increased to four and the watchmen to twenty-four. In 1868 the day and night policemen were united in one force under a chief of police, the number was largely increased, and the whole force was later put under the department of the city known as "The Department of Public Safety."

At the present date the Allegheny police department is represented by thirty day policemen, fifty-nine night policemen, twelve plain clothes men, eight detectives, eighteen wagon men, eight lieutenants, three captains, seven office sergeants and nineteen sub-policemen. This makes a total of one hundren and sixty-five men connected with the department.

In Pittsburg proper, there are two hundred and ten day police, three hundred on the night force, eighty substitutes, fifteen plain clothes men, twenty-five detectives, thirty-two wagon men, eleven teams employed, eight men employed in the offices and eleven stations. The total number of men employed in the Pittsburg police force is six hundred and sixty.

CHAPTER XXVI.

Early Water Works—Fire Companies.

Pittsburg, in common with all great cities, has had to cope with the difficult problem of providing a supply of water for the use of its inhabitants. Notwithstanding that the city is located at the confluence of two great streams, the water question has been one of no little perplexity, and has only been partly overcome by decades of experience and the most thorough and scientific means, all of which have been a source of great expense to the tax payer.

The water supply was gained, up to 1802, from wells and springs which flowed from out the hillsides, these being sufficient for a small town. An ordinance passed August 9, of that year, called for the making of four wells, not less than forty-seven feet in depth. Three of these were to be located on Market street, and were to be walled with stone. To meet the expense of digging these wells, as well as remunerating persons whose private wells were pressed into use for the general public, a tax on the properties mostly benefited by them was levied amounting to $497.96 but of which only $170 had been collected at the end of the year. Wells, with the springs at Grant's Hill, furnished the supply of water for public use until 1826. The file of the *Mercury*, of December, 1813, contained a notice that George Evans had offered to "raise water to supply any part of the city at three cents a barrel." In January, 1818, William B. Foster petitioned the city to furnish it with water. In February, 1826, the mayor of the city negotiated a loan of twenty thousand dollars for the purpose of establishing a system of water works, and in June negotiations were pending for the purchase of land on which to erect reservoir and engine house. In September, that year, the council purchased land for an engine house on the bank of the Allegheny river, fifty by one hundred feet on Cecil avenue, and four lots on Grant's Hill for reservoir purposes. The last named lots were bounded by Fifth and Grant streets and by Cherry and Diamond alleys. The cost was about $3,800. In 1827 bonds to the amount of $200,000 were issued to pay off the water indebtedness. In the autumn of 1826 an engine and double-force pump were ordered; also 12,800 feet of cast pipe. A reservoir was constructed on the summit of Grant's Hill, and the adjoining grounds were beautified by trees and made a

handsome resort. The basin which held the water supply was located where afterward stood St. Peter's Church. The water was taken from the Allegheny river, by the pumping station at Cecil alley, and forced to the reservoir. George Evans was the first water superintendent elected. In May, 1829, the system was doing good service and $2,000 was collected for water rents. At first the engine was only worked twenty-one hours a week. Up to April, 1834, the water works had cost the city $120,000. In July, 1838, the engine was working twenty out of the twenty-four hours a day, and pumped an average of a million and a half gallons a day. The reservoir at that date was considered unsafe, and in August, that year, the city council ordered the purchase of the O'Hara tract, on Elm and Prospect streets, for $25,000; land in the Fifth ward for $2,500; the Laughlin tract at $12,500, all of which was secured by issuing "certificates of loan." In November, 1838, Robert Moore, superintendent of water works, called for bids for grading the reservoir on Prospect Hill. In the summer of 1838, the old works supplied water to 2,679 buildings. The city was growing so rapidly that it became necessary to increase the water system, and $200,000 was borrowed for that purpose. Fourteen thousand dollars were expended in excavating the new basin, which was begun in 1843 and completed the next year. By this system water was taken from the Allegheny and by the pumps was forced to the new basin, on the top of "Stone Quarry Hill," then Bedford street, overlooking the present Union Railway Station. Reports of that day show that in 1847, 5,438 dwellings, 157 hotels, taverns and boarding houses consumed daily almost two million gallons of water. In September, 1848, the old pumping plant on Cecil alley was sold for $24,000. This system of water works obtained until the construction of the more modern plant, which was constructed between 1871 and 1878, and formed the basis of the system now used. This water works system is situated at Brilliant Station on the Allegheny river, from which water is forced to the great Highland reservoirs and to the Herron Hill reservoirs, then direct to consumers. The Highland reservoir stands three hundred and seventy-two feet above the pumping station, and is connected by four thousand feet of fifty inch pipe. The capacity of the reservoir is two hundred and eighteen million gallons, while the capacity of the engine and pumps is fifty-five million gallons daily.

In 1879 the new plant was in excellent working condition. The four great engines, costing $850,000 a pair, were placed in position July, 1878, and under Water Superintendent James Lowrie, the works began operating May, 1879.

The last named plant was rebuilt and remodeled in 1894. Highland reservoir covers an area of thirteen acres, and has a capacity of one hundred and thirty-eight million gallons. There are four lesser reservoirs or tanks, with a capacity sufficient to make a grand total of two hundred and fifty-two million gallons. The four pumping stations are: Brilliant Station, with ten pumps: Herron Hill, with three pumps: Garfield, with two pumps,

and Lincoln, with one pump. In 1907 the total number miles of piping was three hundred and eighty, to which are attached 3,550 hydrants. The recently installed filtering plant—one of the best in the country—cost the city six and a half million dollars. It is known as the "Slow Sand" system, and has a daily average capacity of one hundred million gallons. The total cost of the Pittsburg water works has been ten million, three hundred and twenty-six thousand dollars, a sum standing out in remarkable contrast to the humble beginning in 1802, when less than five hundred dollars were invested in the pioneer water works.

In Allegheny City, the earliest attempt at providing water works was in 1848, and went into operation in the spring of 1849. Prior to that date water had been pumped from wells for drinking purposes, and from the Allegheny river for other uses. For many years, from forty to sixty hand water-carts might be seen trundling along the streets of Allegheny City, delivering water from house to house. This became a business so great that, when water works were agitated, these men and their numerous friends protested against such an innovation in domestic economy. The present water works plant of Allegheny, located at Montrose, was first installed in 1897, and cost about two million dollars, and has a pumping capacity of thirty-six million gallons daily.

The early houses of Pittsburg were almost invariably built from thirty to sixty feet apart. All original lots, it will be remembered, were 60 by 240 feet, and this gave an abundance of room between the houses. Some times semi-detached houses may have been built, where two lot owners adjoining agreed to build their houses with but one wall separating them, but this was very rarely done, if at all. The houses stood separate from each other, and not connected with any other buildings. As a result when a fire occurred in one building even though it was destroyed, the surrounding buildings could easily be saved. As may be supposed there were but few fires in the early history of the town. Many of the houses were made of logs, some were frame with here and there a brick or stone structure. The log houses came first, for logs were cheap and plentiful, and when well built, were enduring, warm and not by any means liable to take fire. The first houses of the town were, of course, log, and the others came only in the latter period. Frame houses were in greater danger from fire, but log houses and brick or stone houses were very nearly on an equal basis as far as danger from fire was concerned. Log houses were much cheaper than either brick or stone, and much easier built, and they accordingly came first. Resultant from this natural safety, because of the distance between the houses, the town took almost no precaution to guard against fires, and this neglect ran on until the town became more compactly built and until the danger was correspondingly increased. It was more than forty years after the town was laid out in lots before a full supply of water for protection against fire was demanded. In the meantime the supply of water for all purposes was drawn mostly from wells and from

natural springs. A few persons living on the banks of the rivers may have taken their water from them, but the water was so warm in the summer, and the rivers were frozen over in the winters, so that they were not to be relied upon. The reader will recall that at the foot of Grant's Hill were several springs of pure water, and these were only abandoned when the ground was covered with buildings. They were used by the people when Brackenridge wrote of the city in 1786, and were still in use as late as 1840. Water of a good quality could be had any where by sinking a well as deep as the strata of sand and gravel that lies on a level with the beds of the rivers, and these until 1825 furnished a sufficient supply of water for domestic use and for extinguishing fires. Steam engines were then in use in operating factories, and the water for them was also furnished by being pumped from wells. There were but few who built houses and did not sink wells at the same time, and a property without a well could scarcely be rented. When the town grew and more public water was needed, the borough at its own expense, began to sink wells and establish pumps. Men having private pumps were not willing to allow the community to use them and wear them out, and this brought about a public meeting in 1802, the purpose of which was to devise a means of securing more water. The meeting was called for in the columns of the Pittsburg *Gazette,* and the borough records show the following concerning it:

At a meeting of the burgesses, free holders and other inhabitants, house holders of the borough agreeable to public notice by the *Pittsburg Gazette,* the following report was made, viz.: That in pursuance of a resolution of the corporation at their last meeting the burgesses and assistants proceeded on the 4th inst., to use such parts of the borough as were presumed most immediately to require a more efficient supply of water. In consequence of that view the burgesses are of the opinion that on Market street four wells with pumps are necessary, viz.: One between Front and Second streets, one between Second and Third streets, one between Third and Fourth streets, and one at the court house. With respect to the latter, the burgesses have learned that the commissioners of the county will agree that it shall be executed at the expense of the county; and with respect to the three former it is their opinion that the expense will be most equitably defrayed by a tax on property contiguous to the wells and pumps, viz.: Both sides of Market street, extending from Water street to Fourth street, and extending westwardly to Chancery lane and Jail alley, and eastwardly one-half the distance of Market to Wood street. On the minutest inquiry it is found that the expense of sinking and walling a well in this borough will amount to $120, and a pump with iron work, $55—$75: therefore, three with pumps, will amount to $525. In consequence of the preceding report, on motion of Judge Addison, the following ordinance was passed by a majority, viz.: Be it ordained by the burgesses, free holders and inhabitants, householders of the borough of Pittsburg, duly assembled, that the burgesses are hereby authorized and empowered to have wells sunk and pumps erected in such parts of the borough as they may think most advisable, beginning with Market street; and it is further ordained that where individuals have at their own expense sunk wells and erected pumps in the street in useful and necessary parts of the borough,

that a compensation be made them, assigning them for public use, the whole expense to be defrayed by a general tax.

ISAAC CRAIG, Chief Burgess.
WILLIAM CHRISTY, Clerk.

This meeting has been written of many times, and has always been called an action of pure democracy—legislation not by representatives, but by the people themselves. The chief officers of the borough, it will be observed, asked for but three wells to be paid for by a special tax on the parts particularly benefited; but when the people were assembled they gave more bountifully; they gave a general power to sink wells where they were needed, as many as the authorities thought advisable, and provided that they should be paid for by special tax on those who were benefited. There is no evidence that a fire closely preceded this meeting, but it is quite likely that the general anxiety for additional pumps was superinduced by a desire to guard against future conflagrations.

The first method of fighting fires is one that is yet seen in rural communities or small villages, namely, by two lines of men reaching from the closest pump to the fire, the one line passing up the buckets filled with water from the pump to the fire, and the other passing the empty buckets back to the pump. It was a poor method but it was the best that could be extemporized, and it saved many a house from destruction. As long as the buildings were separated by even a few feet of space, the fire could be confined to one house, and some times it could be extinguished, particularly if it had gotten but little headway when the double line was formed. When all hope of saving the burning building was abandoned the attention of the citizen firemen was directed toward saving the adjoining property, and in this way they were generally successful. Under such circumstances the whole populace, men, women and children, came out and fought the fire in every possible way. Passing buckets of water along the line in cold weather was not only very hard, but very unpleasant work. It also required strong arms to keep a pump working in full play for an hour or so, but all were willing and anxious to do their utmost in the good work.

The first fire company, as will be seen later on, was formed in 1794. The company had a small fire engine called the "Eagle." It had been brought from Philadelphia, and was probably one of the best in use. At each end of the engine was a lever that was worked by two men. When one lever was pushed down the other went up, and this was supposed to force a constant stream from the tank of the engine through a short hose to the fire. A small stream could thus be thrown to the top of a two-story house or even higher than that, and it was much more effectual than pouring it on with buckets passed along the line and then up a ladder to a fireman to pour down into the flames. The hand engine did not, however, do away with the line of bucket men. The engine was placed near the fire and by the bucket line the water was passed from the pump to the tank of the engine. When one well was

exhausted another was taken up, but it was very rarely that more than two or three wells were near enough a fire to be of much use. Yet these engines, we read, were marvels in their day in Pittsburg, and were taken into parades and covered with flags and streamers, and were greatly admired by the people, who thought they had, through them, secured almost an immunity from future fires.

On April 18, 1795, an act was passed by the legislature authorizing the city of Philadelphia to compel the owners or tenants of houses in the city to procure buckets with which to fight fires. By the act of March 8, 1816, which incorporated the city of Pittsburg, the same authority was given to it. Vested thus with power to do so, the councils of Pittsburg soon passed an ordinance which required every owner or tenant of a house in the city to keep on hand a certain number of buckets, with the owner's name on them, for use in case of fire. The names were necessary so that each tenant might get his proper number of buckets when the fire was extinguished. These buckets were made of leather for the reason that wooden buckets were too easily broken by the rapid handling and excitement incident to a fire. This law and the buckets it provided for, served their day well, and passed out of use only with the introduction of better fire engines and a more plentiful supply of water.

The first system of water works of Pittsburg was built in 1826. The basin system was adopted, and the basin was located on Grant's Hill, near the corner of Grant and Fifth avenue, near where the court house now stands, occupying the ground for the most part from which the cathedral has been lately removed. Most of the houses of the city were below that, and it may, therefore, be presumed that the buckets were of but little use in that part of Pittsburg after the water works were completed. With the abundant supply of water, fire companies increased and became very proficient in their work. They were fostered by the city, and while elderly men took great interest in them, the working force at fires was composed mostly of vigorous young men, who worked with as great strength and energy to extinguish the flames as though their own property was endangered. Many acts of heroism were performed by these volunteer firemen. They halted at no danger where life or property was at stake. There was a general fire organization which had supervision over all the companies. There was a great rivalry among them to see which company would reach the fire and begin to throw water first. These companies were very thoroughly organized, and under a successful management when the great fire of April 10, 1845, came. Though they were powerless to check it no one ever faulted them. The engines were very promptly brought to the fire, and for a time efficient work was performed, but unfortunately the supply of water gave out and the fire was soon beyond control. In all other fires of Pittsburg they were very successful, and doubtless saved the city from destruction many times during the nearly four score years in which they were the only force at time of fire upon which the city had to depend.

The earliest organization for protection against fire in Pittsburg was formed in 1794, and was called the Eagle Fire Company. It was formed when the town was but a village of 1,000 people, or even less. The company had a hand engine which had been made in Philadelphia and brought to Pittsburg on wagons over the old state road just then opened up. It was set up by John Johnston, who was elected its engineer, while Jeremiah Baker and Robert Magee were the assistant engineers. It was a small affair of simple construction which a few men could carry to the vicinity of the fire if necessary. The water thrown by the engine was carried in buckets from wells, or when the fire was near the bank it was carried from the river, for there were no hose, no water works and no fire plugs in those days. The directors of the company were Baker and Magee, as mentioned, and John Hanna, James Gray, James B. Clow and William Watson. William Leckey, who was afterwards elected sheriff of Allegheny county, was engineer of the company in 1800. For many years after its formation the company was managed very carefully by the citizens of the place, and its membership included many of the best men in Pittsburg. The company had a house erected on First avenue, now First street, near Chancery lane, between Market and Ferry streets. The keys to the engine house were kept by Baker, Johnston and Magee, who lived near by. They had sole access to it, and guarded it and its interests with zealous care. In 1810 or 1811 William Eichbaum, afterwards city treasurer, was elected engineer and held the position until 1832. At that time the Fireman's Association organized a more perfect fire department, and Eichbaum was elected chief engineer. The membership of the company is unknown, but it must have been large for that day. In 1815, and for some time before that, absentees were fined 12½ cents each, and the old books which show fines imposed and collected would indicate that the membership was large. The fine of 12½ cents, or a levy as it was called, was a considerable sum in those days, and to avoid its payment most members doubtless attended, yet, nevertheless, in good times there were many fines collected. The old books also show an order for the printing of 200 copies of the constitution of the company, and another order for the printing of 100 ribbons with the word "Eagle Fire Company" on them. These were to be used as badges on parade days. In 1819 or 1820 the company moved to a house on Forbes street, now Fourth avenue, near Chancery lane. The Eagle Company had so increased in strength and members in 1825, that a new hand engine was procured. The company maintained its existence from year to year, though sometimes its affairs were at a very low ebb, and but little interest was taken in it. When the population of the city had increased so as to warrant the formation of new companies, great rivalry sprung up between them. New members and many athletic young men belonged to them, and long races and not a few fights took place. In 1850 a new style of badge was adopted. They were to be of "gilt-black letters in a green ground," and a parade uniform was also adopted. It was to be a green gauze shirt over a white one, white trousers and black belt.

In March, 1851, the engine house of the Eagle Company was destroyed by fire, and the company lost 500 feet of hose and many other articles, so that their loss was in all about $800. It may be necessary to explain that the hose in use then was made of leather, for the rubber material had not then been adapted to its many commercial uses of the present age. At this fire the engine and other apparatus were saved, but it was damaged so that it was not repaired or ready for use until some time in 1854. They then built a building on Fourth avenue, near Liberty street, by the uniting of the funds of the company with subscriptions on the part of the city. A committee composed of George Wilson, Henry Moreland, Alexander Gracie, Thomas Rees and Columbus West was appointed in 1859 to procure or build a steam fire engine. Many thought this could not be successfully accomplished. The first steam engine was built entirely by members of the company from drawings made by James Wilson. The castings were made by James Rees, and the engine was constructed by George Wilson. It was at best an experiment, and those most deeply interested in its welfare feared to try a demonstration of its power lest the experiment might prove to be a failure. They accordingly made a trial trip of it at midnight, and their worst fears were realized. The company was laughed at by its rivals, and the engine was derisively called a "steam boat." The projectors of the scheme were not discouraged but went to work to remedy the defects. By perseverance their efforts were rewarded by a high order of success. Their engine, the work very largely of their intelligence and ingenuity, did splendid work for many years, until it was finally deposed by a more modern one known as the Amoskeag make. In 1870, when the city of Pittsburg established a paid fire department, the work of the old historic Eagle Company was ended.

The Allegheny Fire Company was formed in 1802, and for many years developed but little strength. Their minute book from 1835 to 1847 shows that at that time they were an organization of considerable strength. In 1832 it was in possession of a building on Third street or Third avenue, and in 1835 was housed in the same building with the Eagle Company. After that it occupied the building erected for it on Fifth avenue near the Opera House. It had, in 1834, a large membership among whom were many prominent citizens. As the members from time to time dropped out, their names were erased instead of being noted in the minutes as withdrawing from the company. The officers were not in regular attendance, as is shown by the minutes. The first engineer was George R. White, who afterwards became noted as a merchant. John Herron was once the second hose director and Edward Gregg, a hardware merchant, filled the same position. Other active members, well known in the city, were John Burmingham and S. P. Darlington. In 1836 W. M. Shinn, S. Gormley, George Darsie, W. W. Wallace and J. O'H. Scully were elected officers. In January, 1837, the company at a regular meeting resolved "That the members of the company be earnestly requested to make as little noise as possible, both at fires and false alarms, and more

particularly when such fires may be on the Sabbath." In June, 1837, three delegates, George R. White, W. N. Shinn and George McCandless laid before a meeting the project of forming a plan of relief for disabled firemen. W. N. Shinn was appointed to look after the project. S. P. Darlington reported at the same meeting that he heard many complaints about the conduct of the members. Robert M. Riddle, once editor of the *Commercial Journal,* was elected vice-president. James P. Murray, afterwards of the Exchange Bank, was elected second lieutenant, while J. M. Brush, afterwards mayor, was elected third engineer. John P. Glass was an axman, C. H. Paulson and A. Nimick were hose directors. John Coyle was on the election committee, and James Laughlin was a director. R. H. Kerr was a committeeman, and Gen. James A. Elkin was secretary. It was resolved "That on parade-day, in 1840, the apparatus should be taken out without decorations, but should be drawn by horses." S. P. Darlington, who for many years had been captain, tendered his resignation, and the regrets of the company were regularly expressed by a committee appointed. A medal was later ordered to be presented to him because of his long service. In September, W. K. Nimick was elected fourth hose director in place of John H. Oliver, who resigned. With these names, but a few of the more prominent ones of which are given, the reader will see that many of the best men of the city were members of the company.

In 1840 the company became involved in financial difficulties, and suits were brought against them for debts they had contracted. In September, 1841, the company was re-organized, James E. Wainwright being elected president, and James B. Sawyer secretary, with Alexander Richardson as captain. William C. McCarthy was elected hose director, but he resigned shortly after, and William H. Whiting served as president pro tem, while later D. Holmes and William V. Diehl presided. Some complaints against the intemperance of some of the members had been made, so that in October, 1842, the following resolution was unanimously adopted: "That we, as members of the Allegheny Fire Company, do hereby obligate and appoint ourselves as gentlemen not to make use of any intoxicating drinks while acting in the capacity of fireman." In November, 1842, it was resolved "that when refreshments were offered at a fire the members go to the house containing the same under the direction of officers, who were requested not to allow any but members to enter." A suit was brought about this time by S. P. Darlington to recover about $1,500 due him from the company. In 1842 and 1843, the minutes show that J. B. Murray, Edward Greeg, Alexander Richardson and J. Herron Foster were officers. In January, 1846, the company moved into a new house on Fifth avenue. At a meeting on June 6, George Bradley was appointed a commissioner of one to "investigate the riotous affair in Allegheny City relative to the company." The company continued in the Fifth avenue building until 1857 or 1858, when a new building was erected on Seventh street. During the last years of the existence of the Allegheny

Company, the renowned Robert W. Mackey was one of the active members. In 1870 this company was absorbed by the paid fire department, for there were more companies then than were necessary under the new arrangement adopted by the city.

The Vigilant Fire Company was formed on May 31, 1811. Its first president was William Wilkins, afterwards judge, congressman, United States senator, secretary of war, etc., who is spoken of many times in these pages. John Thaw, the father of the late philanthropist, William Thaw, was secretary and treasurer. A hand engine costing $600 was purchased from a manufacturer in Philadelphia named Pat. Lyon. It was called a "Hydraulic Fire Engine of the Third Magnitude, with all the improvements lately made." It was to be delivered to James Morrison in twenty-five days from September 10, 1812, the date of the agreement to purchase it, and the freight was not to be more than $5.00 per hundred pounds. The cost of bringing it from Philadelphia to Pittsburg was $98.00. The first meetings of the company were held in a tavern kept by William Morrow on the corner of Wood and Fourth avenue. Notwithstanding the fact that they met in a tavern, the renowned Rev. Robert Patterson attended the meetings, and very frequently presided at them. The company was strong from the first, and many men of Pittsburg, who afterwards became leaders in its industries, its commerce and its professional life, were active members. William C. McCarthy was captain of the company, though between 1824 and 1833, the interest taken in it lagged greatly. On November 26, 1833, the company was reorganized at a meeting held in the Washington Coffee House on St. Clair street, and James Crossman was elected president, with Dr. Jonas R. McClintock as captain. In January, 1834, Neville B. Craig, editor of the *Gazette*, was elected an honorary member, and took an active part in building up the organization. On November 16, 1834, there occurred a great fire on the corner of Third and Market streets, and the engine and the men who were working it, were in a very dangerous place. Captain McClintock noticed the danger and ordered them to move at once. They had scarcely gotten out of the place until the wall fell. Had they remained a moment longer they would have been crushed. It was this fire that greatly endangered the old Bank of Pittsburg. The Vigilant had not owned any reel of hose, but had depended on using those of other organizations. This want was supplied and the importance of the company having a new and large engine was made manifest so that a new one was purchased. It arrived on September 26, and was exhibited with great pride in a parade the day following. It was the finest yet seen in Pittsburg, weighing 3,300 pounds, and was purchased for $1,100. In 1836 the company held its meetings in the Eagle Engine House, because of the poor accommodations in the Vigilant's own building. The councils of the city were slow to secure better quarters for them, and the members of the company seriously entertained the idea of disbanding, though a resolution to that effect failed to pass. Nevertheless, quite a number of the useful members

withdrew by resigning. In 1839 they succeeded in procuring better quarters. In 1842 new dissensions arose among the members, whereupon about one-half of them withdrew and organized the Duquesne Company. On November 11 a new constitution was adopted and its members again began to take an active interest in it, for during the dissension it was practically out of service. The Vigilant is the only company that seemed to keep a minute of the fires it attended, and this is only kept between 1842 and 1849 inclusive. In 1849 a new house for the company was finished and occupied. In November, 1861, the name of the company was changed to the Vigilant Steam Fire Engine and Hose Company, and its steam engine was the first that was brought to the city. A house on Third avenue was well fitted up for its reception, largely through the efforts of Robert C. Elliott, who was one of its strongest members. Another who assisted greatly in securing the fine quarters for the company was John J. Torley. The company was afterwards called the "Pride of the West," and its house was known as the "Fireman's Palace."

The Neptune Fire Company was the third company in the date of its organization. It was formed in 1815, though it was then in the suburbs of the town, and perhaps not within the city limits the year following when the borough became a city. It was a bucket-brigade purely, and drew its water largely from the numerous wells of the community, from Suke's run, and from one or two ponds in its vicinity. It had a house on Sixth and Wood streets, and had a very cumbrous engine built in Pittsburg. This engine was rebuilt in 1841, and was claimed to be a very efficient one. In 1842 the company became a very popular one and added sixty-seven members to its roll. Among them was Walter H. Lowry, who afterwards became chief justice of Pennsylvania. Many of its members were suspended because of their non-attendance. The company was instrumental in founding a library, and a resolution was offered by Mr. Gormley that all take the pledge. The Neptune, with the other companies, did noble service in the great fire of 1845, but were powerless to stay it, because of the high wind, the inflammable buildings, and the scarcity of water. Mr. William M. Edgar was chief engineer at that time. In 1846 the company had its engine rebuilt at a cost of $690. The work was done by Sheriff & Company, machinists of Pittsburg. At a parade which came soon after, a resolution was passed providing that the engine be decorated only with the stars and stripes. This company furnished from its membership many soldiers for the Mexican war in 1846 and 1847, as did the other companies of the city. The minute book contains many reports concerning them.

The building occupied by the Neptune was close to the Smithfield Street Methodist Church, and seemed to annoy the congregation a great deal. This resulted in a new location being selected for the company farther up Seventh avenue. The members of the company formed a boat club, and were the proud owners of an eight-oared barge, which was called "Fashion," and this made the company popular and gave them great amusement on the rivers.

The minutes show that there was considerable agitation on the subject of supplying the firemen with liquor while they were at work. In 1852 the company thought they were badly used because a new house was not furnished for them, and they therefore threatened to abandon the organization. These threats were so numerous that the councils of the city at length agreed to assist them in erecting a new building, and it was begun the year following. It was located on Seventh street, and was first occupied by them in January, 1854. The building was finally finished and the new house dedicated with appropriate ceremonies on August 19. A feature of the dedicatorial services was an address by R. Biddle Roberts, who was then president of the Fireman's Association. During 1856 Joseph L. Lowry, who had formerly been a mechanical engineer engaged by the water works system, built a steam fire engine which was called the "Citizen," and it was given to this company. It was larger than common, and was the wonder of Pittsburg, the citizens manifesting great interest in its workings. It was not a success for it was too unwieldly for the appliances of that day. It fairly demonstrated the practicability of running fire engines with steam, and in its day was successful indeed. It was withdrawn from service and a new one purchased in Baltimore for $2,700. The Baltimore engine was not a great success either, for it proved less potent during a fire than the one made in Pittsburg in 1832. David E. Hall was for many years an active member of the company, while Colonel John H. Stewart, afterwards sheriff of Allegheny county, was admitted to membership in 1860, and was elected president. This company, like the others, was absorbed by the paid fire department in 1870.

The Niagara Fire Company was organized in 1838, in "Bayardstown," and had its home on Liberty street. Before this there was a company called the Phoenix, and from it was organized the Niagara. The first president of the Niagara was John Ralston, a tanner, while Samuel McKelvey was its first captain. Soon after they organized they moved to Penn avenue, near Fifteenth street, where they remained permanently. This company had a hand engine built by E. & F. Faber, of Pittsburg, and was always a prompt and efficient organization.

Perhaps as early as 1830 a hose company was organized. In 1833 there were two such companies, one, doubtless the older, called the Pittsburg Hose Company, and the other called the Union Hose Company. Their duty was to furnish hose to the fire companies, but they had no engine, nor was it their duty to handle the hose during the fire. One of these companies was composed of glass workers from the Bakewell, Page & Company works, and from a works afterwards known as the Jenny Lind Company. Their outfit was furnished for them by James P. Bakewell.

The fire companies of Allegheny City were scarcely formed prior to 1840, for the city was not so large as Pittsburg. From 1840 to 1850 the city increased rapidly and the fire companies grew accordingly, so that in 1850 there were three strong companies, named respectively: The Phoenix, The Wil-

liam Penn and The President. All were supplied with the old style engines, which were worked by hand. A fourth company was formed later, which was known as the Uncle Sam. There was always a rivalry among them which induced each organization to try to get to the fire first. In 1860 a company called the Hope was formed, and still later came the Friendship, the Grant and the Columbia companies. Each company gave the foreman a residence in the engine house and a salary of $12.50 per quarter, and he was also given free coal for his own use. Besides the partly paid foreman, there were four men selected because they lived near the engine house, who were each paid $10.00 per quarter, and $1.00 additional for every fire they attended. The hose companies had each a hand reel, but did not have a carriage upon which to haul it from the hose house to the fire as they have now. In 1860 the "Old Hope," a name given to a steam engine, was purchased and served them well for more than a quarter of a century. The wages of the chief volunteers were also increased to $20.00 per quarter. They did not serve for this money for those who were thus paid not unfrequently pooled their earnings and divided them equally among all the members of the company. Allegheny City's fire companies were re-organized on the paid department basis in 1870, and in this the city showed more advancement than Pittsburg had shown, for though having a much smaller population, the paid fire department was introduced in the same year that Pittsburg introduced it.

The Allegheny fire riots occurred in 1849. While neither city had a paid fire department it was the custom and indeed the implied contract of both cities that the firemen should be regularly paid for such services as they rendered. This had been neglected for some time in Allegheny. The firemen awaited the councilmen patiently and at length sent a memorial asking not only for the amounts due them but for an increase in the amounts regularly appropriated to their companies. For some reason the city councils paid no attention to the memorial. The firemen then organized a strike which manifested itself when the next fire broke out. It was on Ohio street. In response to the call a number of companies came promptly but the companies which had not been paid refused to lift a hand to quench the flames and not only that, but they refused to allow the companies that were willing to do so to go near the flames. The firemen from Pittsburg were driven back with clubs and pelted with brick bats and their hose cut whenever they dared approach the fire. Several individual fights occurred and many bloody noses was the result. The fire was allowed to consume the building and fortunately it did not spread. A newspaper of the day characterized this as the only instance in any city in the United States wherein hundreds of men, "well named in this instance as firemen, stood by exulting in the progress of the flames they might have quenched." The punishment came to the property holders when in a few days, the fire insurance companies raised the rates of insurance so high that many of them could not afford to insure. A protest on the part of the business men met with the response from the insurance companies that the rates would not

be reduced until they had some assurance that the firemen would not be interfered with at future fires. The Pittsburg companies, which had been prevented from reaching the fire and otherwise severely handled, resolved not to assist Allegheny in future fires, and some of them passed resolutions pledging their members to resign rather than to assist Allegheny again when in distress. Several of the Allegheny firemen, who had interfered with companies that were willing to work were arrested and convicted of rioting and fined accordingly.

Often there arose a rivalry between two or more companies and in 1855 this spirit was carried so far that there were bloody fights between members of different companies. In several instances engines were hit with brick bats as they passed along the streets, by members of jealous companies. The Vigilant Company were attacked once and the firemen were forced to flee leaving their engine behind. The rival company worked their vengeance out on it by breaking it and battering it out of shape.

When the city grew great and when steam fire engines were perfected, the work became too extensive to be handled by volunteers, and the city took control of the matter by the organization of a paid fire department. This department, in Pittsburg, was authorized by an act of assembly of March 23, 1870, the act giving the city councils the requisite power for its management. At first a tax of three and one-half mills on the dollar on the gross receipts of all fire, marine and life insurance companies or organizations doing business in Pittsburg was authorized, to support the department, or to assist the city in its support. The idea was that insurance companies having the greatest interest in the suppression of fires should be made to pay for their support, though it is difficult to see why life insurance companies should have been thus taxed. But this method of supporting the department was soon abandoned and the cities have since paid the expenses of the department out of their general revenues. In 1873 a loan became necessary to enable Pittsburg to purchase engines, hose, etc., and a bond issue of $200,000 was authorized for that purpose.

Concerning the present fire department of Pittsburg, the following facts were obtained from the last (1906) annual report of the bureau of public safety:

Aggregate service rendered by the fire department—Miles traveled, 5,370; hours on duty at fires, 2,752; number of feet of hose laid and used, 349,050; ladders raised and used, in feet, 15,927; number of men appointed during year, 62; men dismissed, 28; men died, 3; men resigned, 6; men retired, 5. The present force consists of a chief engineer, 6 assistant chiefs, 38 captains, 43 lieutenants, 31 enginemen, 79 drivers, 192 hose men, 65 ladder men, 6 fuel wagon men, total number in service 460. The total number of feet of hose in service is 99,700; hose in reserve, 5,850 feet; total number of engine companies is 35; number of chemical engines in use, 2; hook and ladder companies, 11. There were 716 gong alarms in use and 552 still gongs. The total alarms attended during the year was 3,827; number of fires in year,

1,200; persons killed outside of the department, 9. The total property loss was $408,437. The amount of insurance carried on this property was $7,490,225.

The fire department of Allegheny City in 1906 had 221 active alarms and 161 still alarms; the number of engine houses was 14; the number of firemen was as follows: Chief engineer, three assistants, 10 engineers, 47 hose men, 18 captains and 57 subs, making a total of 138, besides stokers, drivers, clerks, etc. The number of horses employed in the service of the department was, by engine companies 10, by hose companies 6, by truck companies 5, by fuel wagons 2, extra horses for emergency 6, making a total of 78 horses. The loss sustained by fires in 1906, was $168,994; insurance on same, $702,434, amount paid on losses, $132,332.

CHAPTER XXVII

Floods—Temperature—Snow and Rainfall.

The advantage which Pittsburg reaps from being on three navigable rivers is somewhat discounted by their overflow when high waters come. The first mention of high water at Pittsburg is by Brackenridge, which we have quoted. His estimate that prior to 1786 the marks of ice on trees indicated that the water had been thirty feet above the low water mark has been disputed by many but may not be very much out of the way. The *Annals of the West* make notes of the flood of 1789, which overflowed Marietta and other Ohio towns, but does not mention any damage done at Pittsburg although the flood must have originated above this. It is usually supposed that we have higher floods now than we had in the early days. The popular theory is that the taking away of the timber throughout the immense valleys and on the mountains adjacent, the waters of which are drained into these rivers has brought about greater floods; that the dense forests and underbrush absorbed and held back a great deal of the rainfall, and that it thus more gradually found its way to the streams, whereas, now that the forests are gone the rain falls in torrents and flows unobstructed to the rivers, causing greater floods. This is true in a sense, but has not brought about greater floods than we had seventy-five or a hundred years ago. The forests preserved the snow from melting with the falling temperature that frequently occurs during the winter months, or on mild or sunny afternoons. Those who frequent the woodlands in the winter season will readily recall that the snow is deeper there than on denuded hills. With the breaking up of winter all this accumulated snow in the continuous forest was melted and our floods were undoubtedly as high then as now. Little is said about them by the early writers. Unless the flood did special damage it was hardly worth while to chronicle it. When the town was in its youth it did not encroach on the river banks as much as it does now, so there was little damage that even an unusually high flood could do. Then as now the highest waters came usually with the melting of the snow and ice and with the heavy rains of the early summer. Tradition has handed down to us however the legend of the Pumpkin Flood, but does not accurately fix the year it occurred. It was most likely some years after 1800 for it took it name from the immense number of pumpkins which floated down the

streams and this fixes its date in the fall of the year when they were plentiful in the agricultural districts. It must also have occurred after the creek and river bottoms were cleared and cultivated for in the earlier settlements there would not have been pumpkins enough to give their name to the flood. There is a well grounded tradition that the pumpkin flood washed the ground from the outcrop of the Pittsburg seam of coal in Ligonier valley in 1808 after which the coal used in the blacksmith shop at Hermitage Furnace was procured near at hand instead of being carried on horse back as it was before from a known coal vein on the Conemaugh river. But there may have been more than one flood which was designated as the Pumpkin Flood and there is no writing we can find to give the exact year, with definite proof.

There was a second great flood in 1832 and about that time came the tradition of a belief among the common people that the floods came about every twenty years, which would indicate that there was one about 1812. No meteorological record was kept at that time and this speculative information is the best that we can give the reader. To carry out the twenty year theory we had a great flood in 1852, but neither the flood of 1832 or 1852 went high enough to strip the crops from any but the lower bottom fields. No doubt the Pumpkin Flood took from the farmer his hay, fodder and pumpkins upon which he intended to feed his stock during the following winter.

The flood of 1832 is more nearly within the recollection of men now living and the mark of its water for many years was kept on a brick building below Penn street on the banks of the Monongahela river. The winter of 1831 was a severe one beginning early in November. Later in the same month the three rivers were frozen over at Pittsburg and remained frozen until February, 1832. During this time the ferrys were closed and the ice was so thick and strong that men, horses and heavily laden wagons passed over it without danger. This natural bridge was particularly noted for it was free from toll and was most thoroughly taken advantage of by the country people who brought to the city market all the commodities they had for sale or exchange. In addition to this there was sufficient snow on the ground to make good sleighing, but all reports indicate that the snow was not unusually deep either at Pittsburg or in the outlying districts, the water of which is drained into the three rivers. This winter of long continued cold weather was terminated on February 6 or 7, when a warm and gentle rain began to fall. It was, moreover, a long continued rain, and fell on ground that was frozen solid and that could not, therefore absorb any of it. The rain melted the snow on the mountains and in the valleys and all rushed forward until every tributary of the Ohio was filled beyond its banks and it was unable to discharge the water as rapidly as it was thrown into it. It overflowed its banks and the immediate valley even far beyond Cincinnati, was under water. In many places the river was several miles in width and remained so for several days. Towns and villages were flooded so that many of the inhabitants were compelled to flee for safety to the neighboring hills. Houses, barns and out buildings

were swept away and the loss was indeed very great. The river continued to rise gradually in the lower Ohio valley until the 19th of February, when at Cincinnati, it had risen sixty-three feet above the low water mark, for at that place it is very narrow and has high banks. It was fortunate that it arose gradually, for much property and all the inhabitants were removed to higher ground. The river broke up at Pittsburg on February 9 or 10, and continued to rise until the 14th when it began to fall gradually. In Allegheny the territory between the first and second bank where the Fort Wayne railroad crossed Federal street, was covered with water. The entire point between the Allegheny and Monongahela rivers at Pittsburg was covered with from four to six feet of water, and it extended up to Sixth street on Penn and Liberty streets. Wood street was also inundated as far as Fourth avenue and all along the rivers the water came over the banks except at such streets as Grant, Smithfield and Market, which reached the river on elevated banks. The flood did not result in great damage to Pittsburg because it rose rather slowly and gave the people time to remove their goods. Cellars were flooded and the lower rooms of many houses were filled with water and mud, and business was crippled for a few days, but otherwise the damage in the city was not great. A mark of the highest point reached by this flood indicated that it was twenty-four feet above the low water mark. To the farmers who lived on the level ground adjacent to the rivers, the flood was attended with greater loss. Hay stacks, fences, barns, stables and houses standing on the lower ground were carried away, and in some cases horses and cattle were caught and swept down the rivers. A few small houses came down the river with their occupants on the roofs, but all, we believe, were rescued by the Pittsburg people who had plenty of skiffs and who were able to handle them dexterously. For long years afterwards, stories were told of cradles floating down the rivers with sleeping infants in them, but these reports are probably somewhat apocraphal. Those who watched the flood constantly were confident that no cargo so important as that passed down the river unless they were borne by in the darkness when both a knowledge and a rescue of them were impossible.

It was this flood that removed Smoky Island. This island began a short distance below the mouth of the Allegheny river and extended up the river almost to the Sixth street bridge. Brackenridge wrote of it in glowing terms because of its beauty. The hill of which he wrote had disappeared before 1832. About 1831 a frame building was put up on the lower end of it to be used as a factory. Its owner was just about ready to begin work in it when the flood came; when the waters subsided the island and the factory were both gone except a small part of the former at the lower end. Even this has since been gradually washed away until now scarcely a sand bar remains to show that Smoky Island once existed.

The spring of 1852 brought another great flood, but the waters did not rise so high as at the flood of 1832 and they passed off more rapidly. When the high waters began to subside at Pittsburg a packet for Cincinnati left the

wharf and on it was a traveler who went to Louisville and St. Louis and returned at once. He met the high waters at Cairo, Illinois, on his return and when he reached Pittsburg his boat grounded on Brunot's Island, though he was gone but two weeks. The flood of 1852 came more rapidly than the flood of 1832 and caught more people who were unprepared for it, and therefore, destroyed more property. It brought down the rivers great quantities of logs and sawed lumber and was attended with the usual accompaniments of sudden freshets. There was a flood in 1874 in Pittsburg, but it was not a general flood like the others. It was due to cloud burst over Spring Garden run in Allegheny and over Chartier's creek at McKees Rocks northwest of Pittsburg. These streams in a few minutes almost, were converted into rivers for the rain came down in impetuous torrents. Spring Garden run was unable to carry off the water which came tearing down the rocky gorge. Houses were built close to both sides of the run and these were swept away in less than an hou., and several lives were lost. The flood was purely a local one and its waters were scarcely noticed when they reached the Ohio river.

The next great flood came in 1882, thirty years after the one previously described. There is, therefore, no twenty year rule. There was a flood in 1759 and the Pumpkin Flood and one in 1832 and another in 1852, others in 1861, and in 1865, which were respectively thirty and thirty-one feet, and none then till 1882. Yet there then came a flood in February, 1884 that quite equalled the former floods. There were often periods in the early days of Pittsburg when there was no freshet even in the fall sufficient to raise the waters so that barges could be launched.

The flood of March, 1902, beginning with the second day of that month, was the greatest in the history of Pittsburg, up to that date, since that of 1884. The registered high water mark, being shown by the government bureau, was thirty-two feet and four inches. The great steel and other manufacturing plants were closed and fully seventy thousand workmen were thrown out of employment, for the time being. Homes and business houses were badly suffered a loss of at least a quarter of a million dollars, mostly along Penn damaged; railroads were tied up several days; the down-town districts avenue, in the vicinity of which there were eight squares inundated. Mud filled the streets and basements in the cities on both sides of the river, causing great financial loss. It was conservatively estimated that the two cities met with a loss aggregating millions of dollars. At the Penitentiary seven hundred prisoners and the warden worked heroically to protect the state's property. The light and heating plants were both inundated, leaving homes desolate and in darkness. The electric cars were abandoned on Second avenue, and other points; the old-time horse cars were brought into requisition for several days.

The highest flood known in Greater Pittsburg, however, was that which swept through the city in all its destructive fury, from March 14 to 17, 1907, when the government record shows the high water mark to have regis-

tered at thirty-six feet and six inches, in the Allegheny river, at the Sixth street bridge. An ice gorge had lodged at Parker's Landing above the city and when the mass of ice broke and came down stream it greatly increased the flood. A quarter of a million workmen were thus deprived of work until the flood waters subsided. The department stores on Penn avenue had water in their basements by which thousands of dollars worth of goods were ruined. Water was on the main floors in several instances. Shop girls, who entered dry shod in the morning, had to be taken out in skiffs in the evening. The proprietors might have been seen wading about their places with hip boots, as they directed the workmen at the pumps. From Liberty avenue to the Sixth street bridge, there was a placid lake in which floated occasionally huge cakes of ice. Guests were taken from the offices of the hotels by means of boats for several days. The Hotel Anderson, the Annex and the Lincoln were flooded and their guests could but amuse themselves on the second floors by watching the excited populace in the streets below. A little stern-wheeler boat plied the waters in Penn avenue, near Horne's department store and greatly astonished the people by its shrill whistle as it headed "toward the sea," an event which had never been possible in the city before. One of the sad aspects of this flood was the loss of more than a score of human lives, lost at various places along the low lands in Allegheny county. This was beyond any question the highest stage of water ever seen in Greater Pittsburg, since the land was wrested from the Indians. The *London Times* of that date, evincing the usual knowledge of the English concerning America, reported that the flood in Pittsburg was the highest that had been known for three hundred years. Following the first days of this flood, several disastrous conflagrations occurred in different parts of the city. Many squares of the city were inundated, reaching as far up as Liberty and Wood streets, where the water was from eighteen inches to three feet in depth. The carefully estimated loss to the city and property owners was not less than fifteen million dollars. The *Pittsburg Dispatch,* after the receding of the waters, published a record of the floods of the city, as taken from official records, which is here subjoined:

1810	32 feet	1898	28 feet 5 inches
1832	35 feet	1901	28 feet
1852	31 feet 9 inches	1902	32 feet 4 inches
1861	30 feet	1903	28 feet 9 inches
1865	31 feet 4 inches	1904	30 feet
1884	33 feet 3 inches	1905	29 feet
1891	31 feet 3 inches	1907	36 feet 6 inches

The following table indicates the mean temperature and precipitation, by years, from the establishment of the government weather bureau at Pittsburg, in 1871, to the close of 1906:

	Mean Temperature.	Precipitation.
1871	55.6 degrees	——
1872	50.0 degrees	31.59 inches
1873	50.4 degrees	40.47 inches
1874	51.7 degrees	39.36 inches
1875	49.0 degrees	34.3 inches
1876	51.9 degrees	37.1 inches
1877	53.8 degrees	34.72 inches
1878	53.6 degrees	38.76 inches
1879	52.6 degrees	37.02 inches
1880	54.2 degrees	32.07 inches
1881	54.5 degrees	37.30 inches
1882	53.2 degrees	38.63 inches
1883	52.3 degrees	43.17 inches
1884	54.2 degrees	34.81 inches
1885	51.2 degrees	34.10 inches
1886	52.9 degrees	39.18 inches
1887	54.1 degrees	41.95 inches
1888	51.7 degrees	39.89 inches
1889	54.3 degrees	41.37 inches
1890	51.1 degrees	50.61 inches
1891	53.8 degrees	38.28 inches
1892	52.1 degrees	32.66 inches
1893	51.6 degrees	37.84 inches
1894	54.5 degrees	28.17 inches
1895	52.3 degrees	27.50 inches
1896	53.3 degrees	44.35 inches
1897	53.3 degrees	35.08 inches
1898	54.6 degrees	35.76 inches
1899	53.6 degrees	33.85 inches
1900	54.7 degrees	25.73 inches
1901	52.6 degrees	40.76 inches
1902	53.2 degrees	32.22 inches
1903	52.9 degrees	38.81 inches
1904	51.2 degrees	33.76 inches
1905	52.0 degrees	35.19 inches
1906	52.8 degrees	31.29 inches

The mean temperature in Pittsburg for these thirty-seven years was fifty-two and nine-tenths degrees above zero. For the same period the mean rain and snow fall was thirty-six and thirty-eight one hundredths of an inch. The highest degree of temperature was in the year 1881, when the extreme heat was 103 degrees fahrenheit. The lowest point reached by the mercury for the period was twenty degrees below zero, in 1899. The greatest annual rainfall was in the year 1890, when fifty and sixty-one hundredths of an inch fell, while the least annual rain fall was in the year 1900, when the precipitation was but twenty-five and three-quarters inches during the year.

In the last two decades the average snow fall has been thirty-two and six-tenths inches, while the greatest snow fall was fifty-five and seven-tenths inches in the year 1902. The least snow fell during the year 1888, when it was but eighteen and seven-tenths inches.

CHAPTER XXVIII.

Early Light—Gas—Natural Gas—Its Result on the Growth of Pittsburg.

For more than two decades after Pittsburg was incorporated as a city, there were no better lights than the old fashioned wick lamps and candles. But after the canal was completed there came with the increased population a desire for all modern improvements. Accordingly the question of the manufacture of artificial gas from the unbounded fields of coal which lay near by was agitated, and a city ordinance was passed in August, 1827, granting to William Griffiths the exclusive privilege of furnishing gas light for the city. He was bound to supply gas for not less than twenty lamps and to keep them lighted each night from a half hour after sunset until a half hour after sunrise and to keep them in proper condition. For this the city was to pay him five dollars for each lamp. This contract was for a term of twenty-one years after which, if the city desired to do so, they were upon the payment of its value, to become the owners of the gas plant. Should they fail to take over the plant the contract was to remain in force for ten years more at which time it was to pass to the city at its appraised value. But a great opposition to this monopoly arose from the people, because of its being too exclusive a monopoly, for the citizens themselves were determined to have stock in it. This opposition was carried to such an extent that Mr. Griffiths was compelled to transfer his rights to a stock company. This was composed of Benjamin Bakewell, James Craft, Harmar Denny, Henry Holdship, Benjamin Page and others. The company was chartered as the Pittsburg Gas Light and Coke Company. Its capital stock was $20,000 divided into two hundred shares of one hundred dollars each. In 1828 the company advertised for bids in building a tank thirty-five feet in diameter by sixteen feet deep and for ten thousand feet of cast iron pipe. The stock had all been taken and now a new trouble arose. It seems that nearly all, if not quite all, the stock had been subscribed for in a few minutes after the passage of the ordinance allowing the people to take a monied interest in the company and that nearly all of it was taken by members of the select council. This created great indignation. They took it at par and the citizens claimed that had it been sold at auction it would have brought a premium of at least twenty or twenty-five per cent. This created so

much indignation in Pittsburg and it was so bitter that the council was compelled to pass another ordinance which placed the stock on the market so that any who so desired could purchase it. In February, 1829, a change in the name of the company took place and it became the Pittsburg Gas Company with Edward Gray, William Gwynn, Daniel Raymond and Neville B. Craig as chief officers. It is probable that this change was brought about by the indignation over the first sale of stock. The new company was authorized to lay pipes through the streets and furnish gas. The city was to pay them $4.00 per year for the street lamps. They were to light the city included by a line beginning at the "point," thence up the Allegheny river to Washington, thence to Grant street, thence to Fourth street, to Ross street, to the Monongahela river and down the river to the place of beginning. About this time, January, 1829, gas was first used in this vicinity, it being the experiment being made in Allegheny by a man named Bain. He lived near the Allegheny terminus of the St. Clair street bridge. He made it from a small retort over an ordinary fire and conveyed it to Lambdin's museum and painting gallery in sufficient quantity to demonstrate that coal would produce gas of a good quality and many visited the museum to see the new and wonderful light. The pipes of the gas company were finally laid in 1834 when Abraham H. Hodge, George D. Blaikie and Andrew N. McDowell seemed to be the chief officers of the Pittsburg Gas Company. They were bound by contract to have 3,000 feet in operation by July 4, and to lay 3,000 feet each year afterward, and the monopoly of lighting the city for 21 years was granted them. The plant for lighting the city for twenty-one years was granted them. The plant for lighting ing the city required more money than was at first thought necessary and the capital stock of the company was accordingly increased. In the early part of 1835 the councils authorized the sale of additional stock, reserving the privilege of taking the stock back in the event they should desire to purchase the plant, by paying the stockholders for their investment. Books for the sale of stock under this arrangement were opened in May, 1835. The stock sold readily at a premium of from two to five dollars per share, so that in but little over a month the premiums alone amounted to $2,100. The laying of the pipe went on slowly, but in October, 1835, the directors of the company gave notice that they hoped to be furnishing gas to the city in December. This was not accomplished so early for on April 6, 1837, the *Gazette* celebrated the lighting of the city by gas in the following words: "Last night, for the first time, several of our streets, and many of our stores, etc., were lighted by gas. Although the evening was dull and gloomy, yet that portion of the city within the limits of the gas-pipe laid down was well lighted, and many of our citizens traversed the streets, gratified with the great improvement and addition to our comfort. We visited the Exchange Hotel and found it most brilliantly lighted up. We did not call at any other of the hotels. The gas lights burn certainly with as much purity and brilliancy as any that we have ever seen." Richard Biddle had been a faithful worker in the long drawn out work of

instituting the gas works plant and had served as president of the board of trustees. In August, 1837, shortly after the plant began to furnish light he resigned and a resolution speaking in most laudatory terms of his faithful work and energy in the matter and expressing a deep regret that he tendered his resignation, was passed by the board. As rapidly as possible in that day, the pipes were laid over the city. On September 18, the *Gazette* announced that the Allegheny bridge would be lighted for the first time that night. It gloried over the improvement and expressed a hope that the Monongahela bridge would "soon follow suit." It will be seen therefore that it required the work and thought of the best men of Pittsburg and Allegheny for a period of ten years to introduce gas into the city, though there was no city in the country with such an abundant supply of coal. Pittsburg had then a population of about 18,000, while Allegheny had 8,000. Many changes took place in the gas works, its management, its capital stock, etc., in the next forty years, but gas remained the best method of lighting the city for nearly fifty years, when electric lights came to take its place in 1880.

Shortly after the oil refining business was taken from Pittsburg, came the use of natural gas; though there was probably no real relation between the use of gas and oil for domestic purposes, they are closely associated in many ways. Gas was found extensively in the oil regions, and was for many years a nuisance to oil producers for it was constantly escaping from the wells, when they were in quest of oil, not gas; the latter being regarded as practically useless to them, for they had no idea of the commercial uses to which it could be put. Gas had been discovered in portions of West Virginia and Pennsylvania many years before. At New Cumberland, West Virginia, it was used during the sixties in burning fire brick. Equally early it was used at East Liverpool, Ohio. Spang, Chalfant & Company began its use at Whitney, a suburb of Pittsburg, in 1875, but they used it to but a limited extent. Graff, Bennett & Company introduced it as a fuel in July, 1884. The Philadelphia Company was formed shortly afterward, and its purpose was to supply gas to all consumers of Pittsburg. The great supply came from the Murraysville region, where gas had been found in great quantities in the late seventies. The company also drew from wells nearer Pittsburg. They laid a pipe line from the Murraysville field and from other gas wells nearby, to the city and through its principal streets. The Murraysville gas well had for years been of no practical value. An immense volume came pouring from its mouth from one year's end to another for several years. The roar of its discharge could be heard for miles in every direction, and when lighted up at night its light could be seen against the sky for ten or fifteen miles. It had been discovered while boring for oil when a depth of fourteen hundred feet had been reached. Its output had been utilized to some extent as a means of making lampblack, but the venture did not prove a very successful one, and when in 1881 the works caught fire and were consumed, they were not rebuilt. The well remained in blast as a wonder of the age and was said to be the largest gas

well in the world. It was visited by many hundreds of people, and among them were the distinguished scientists of the day, who wished to verify the reports of its magnitude and analyze its gas. When it was finally taken to Pittsburg in pipes it brought about a great change in the city. It at once drove coal largely from the Pittsburg market, for it became the fuel not only in private houses all over the city, but was used in all kinds of factories and for every purpose that coal and coke that been used except in smelting ores in blast furnaces. It has been estimated that in the years immediately preceding 1884, Pittsburg used three million tons of bituminous coal per year, and that after natural gas was introduced the consumption at once fell off to less than one million. In generating steam and in house warming it is a cleaner, cheaper and safer fuel than coal, and it makes better iron, steel and glass than can yet be made by coal. The report of this cheap and superior fuel spread immediately throughout the Union, and many industries in the East, where coal was expensive because of the cost of transporting it, removed their plants and located in and about Pittsburg. Gas was at the same time piped to the East as far as Johnstown, and was accessible in almost every section of Western Pennsylvania, so that the Pittsburg district felt the marvelout effects of its introduction and grew accordingly in population and in wealth.

From the earliest times Pittsburg has been called a smoky city. This was noticed even before the amount of coal consumed was worth considering. Surrounded on all sides by hills, it doubtless is more smoky than most cities are that consume an equal amount of coal. But by the introduction of natural gas the city became much cleaner. The smoke of three million tons of coal hung like a cloud over the Ohio valley, and discharged almost a continuous downpour of flakes of soot and dust. For a time the black cloud disappeared in part; the atmosphere cleared up in a great measure, and Pittsburg became fully as clean as most cities which use bituminous coal. Nor was Pittsburg alone in this era of prosperity and cleanliness. Gas was found in abundance in almost every direction from Pittsburg. Scarcely was there a town within the radius of fifty miles that did not use this cheap and convenient fuel. The result was an unheard of stimulation of all kinds of business, but particularly of those which required great quantities of coal. Pittsburg being the center benefited from all this upbuilding and rapidly increased its already immense factory outputs. Gas, thus being brought to Pittsburg from almost every direction, drew business for the city from a much wider field. When one field is exhausted a new one is found. Generally the most desirable fields are those which tap the gas productive strata at great depths. When the strata is less than one thousand feet from the surface of the earth, the well is not looked upon as one which will long hold out.

For some years natural gas was scarcely used for illuminating purposes, but inventive genuius soon discovered and introduced lamps and burners which are used almost exclusively in its consumption and have produced a light

not by any means inferior to the best artificial gas. In many country villages it was burned recklessly in large jets as it came from the earth. Thinking it was inexhaustible, it was shamefully wasted in every section. This belief was perhaps superinduced by the fact that it had escaped in unlimited quantities from numerous wells, notably from the Murraysville well, without showing any signs of diminishing its power. The consumers increased rapidly, and after a few years, generally in Western Pennsylvania and particularly in Pittsburg, the supply, while it scarcely diminished, was not equal to the increased demand, and many manufacturers, who had installed it in their plants, were, therefore, compelled to resume the use of coal in part at least. New fields, however, have been discovered from time to time, and they are now able to mix natural gas with artificial gas, so that by using the compound they are still able to supply all who desire it for domestic purposes, and there are many manufactories which have never abandoned its use. With the demand increasing the price advanced. New establishments which came to Pittsburg and vicinity that they might reap the advantages of this cheap fuel in making heat, found little inconvenience in changing to coal, of which, at all events, there is an inexhaustible supply in and about the city. Coal can be purchased in and about Pittsburg at one dollar per ton, as a rule, in the busiest times, while it is frequently sold for much less than that, yet the freight alone to the seaboard, where millions of tons are annually shipped from the Pittsburg district for manufacturing purposes, is at present one dollar and ninety cents per ton; so that the manufacturer who came here from the East when natural gas seemed inexhaustible is still a great gainer in the yearly outlay for fuel. The consumption of coal in Pittsburg is not so great per capita as it was before the discovery of natural gas. But Pittsburg is no longer a clean city. It is filled with soot and the sun is almost invariably darkened by clouds of smoke. This is shown to the casual observer in the dark colored paints that are invariably used throughout the city, and indeed through Western Pennsylvania generally. It is, however, not an unhealthy city. The extensive use of coal is attended with many discomforts, but they are not such as to render the atmosphere unhealthy. Nor do we believe that the smoke and soot are unavoidable, but rather that in a few years the war, which is now being waged against soot and smoke, will be triumphant on the part of those opposing it, and will render Pittsburg a really clean city. The mortality of Pittsburg is rarely ever as much as twenty deaths in a thousand population per year, and this is unusually low.

CHAPTER XXIX.

Architecture.

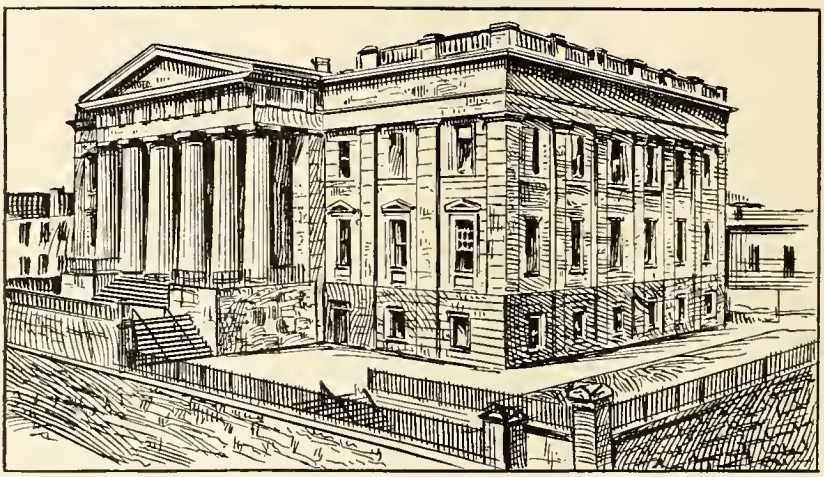
The first buildings of Pittsburg were of logs, some of which were unhewn; then came rude stone structures made from material quarried nearby, and these in turn were followed by brick buildings, for with an abundance of clay and fuel, it was an easy matter to burn brick. In none of them was there any attempt at architectural beauty. Most of them consisted of four square walls, with small windows and doors, thus displaying every evidence of economy. The interior finish of the early houses displayed more taste and beauty than the exterior, for it was easier to carve and fashion in wood than in stone. Even in the latter part of the eighteenth century, therefore, carpenters were able to make paneled doors, to adorn the window and door frames, to build extensive cornices and to fashion and carve mantles which are highly prized and copied even to this day. Nevertheless there was a beauty in the simplicity of the walls that gradually developed a style which in modern days is called Colonial architecture, and which even yet predominates in Pittsburg. The oldest buildings of the city, which are yet standing and which show any special pretention to architectural beauty in their construction, are on Penn street on both sides in the lower part of the city. Many of them were built as early as 1830, and are prized very highly as the purest specimens of Colonial architecture in Western Pennsylvania. All parades were formerly made to pass down this street, that the architectural beauty of its buildings might be displayed. Usually when a town or small city begins to construct pretty homes, a similar taste for architectural elegance is displayed in their public buildings and churches. The laws of the state compelled them to build the first court house of stone or brick, to insure the public records against destruction by fire. It was a simple building with some attempts at display in the inside finish, most of which would be considered in very bad taste if measured by our art critics of the present day. Some of its display features have been written of as absurdly ornamental. Perhaps the first real progress in architectural beauty was shown in the churches that were built between 1820 and 1830. The building of the turnpike between Philadelphia and Pittsburg, and the projecting and opening up of the Pennsylvania canal, gave

Pittsburg builders a new ambition in this direction. Elsewhere we have referred to John Henry Hopkins, who gave Pittsburg the benefit of his naturally refined and cultivated taste in the building of Trinity Church in 1825. Prior to that it is safe to say that no public building displayed a higher order of architectural taste than the average western carpenter could fashion. There were one or two towers and a spire, and several porches with wooden columns, and if the latter may be called Ionic or Doric in style, it is quite likely that the builder builded more classically than he knew. But Hopkins was a scholar in art, and his church was the first attempt in Pittsburg to introduce the Gothic style in church architecture. It was also the first building of special architectural pretensions erected west of Philadelphia. Almost at once followed the University building, on Third street, and the Theological Seminary building in Allegheny. Both were structures of classic style, and were most commendable for their day, far beyond what had yet appeared in the West, save the one exception of Trinity Church.

There is no reason for supposing that there was a resident architect in Pittsburg prior to 1828, when the city had a population of perhaps eleven thousand. These finer buildings were most likely built from plans drawn by Philadelphia architects. This may also have been true of Trinity Church, but the credit of inducing his parishioners to adopt it is nevertheless due to Hopkins. But the *Mercury* for March, 1828, announces that John Behan, an architect and a civil engineer, has located in Pittsburg. When the commissioners determined to build the penetentiary in 1822, they procured the services of an architect named Haviland in Philadelphia to design it and to superintend its construction. For this reason he is supposed to have designed the other classic buildings mentioned above. It was the first large Gothic building in this section. It had heavy battlemented walls, perhaps introduced to impress the public with the difficulty its inmates would encounter in escaping from it; it had bastions at its corners, a feature most likely taken from the forts of a former period. Haviland did not remain in Pittsburg, though Behan did, and earned a name in the city, too, for in 1829, he lectured on architecture before the Philosophical Society of Pittsburg. In the thirties were built a Presbyterian church with colonnade and an Episcopal church with Doric columns, and at least two bank buildings of superior style. They were the Merchants' and Manufacturers' Bank and the Bank of Pittsburg. The architect who built them was most likely John Chislett, who came to Pittsburg, or at least began business there, in 1833. He was the architect of the court house built in 1841, and this building showed clearly the bent of his mind toward the classic style of architecture.

The court house, which was destroyed by fire on May 7, 1882, was one which reflected great credit on those who built it. Its exterior showed that the people of Pittsburg even at that early day were cultivating a taste for the highest style in architecture. The builders were Coltart and Dilworth. The main part of the building fronted 165 feet on Grant street, and extended back

along Fifth avenue 100 feet. In the rear of this structure was the jail, which was connected with it. Facing on Grant street was a portico of the purest style of Grecian architecture. The entablature was supported by two rows of fluted columns, six in each row, and each column was six feet in diameter. The entire structure was of gray sandstone, which had been quarried from the



RUINS OF OLD COURT HOUSE, PITTSBURG

Built 1841; burned down Sunday, May 7, 1882.

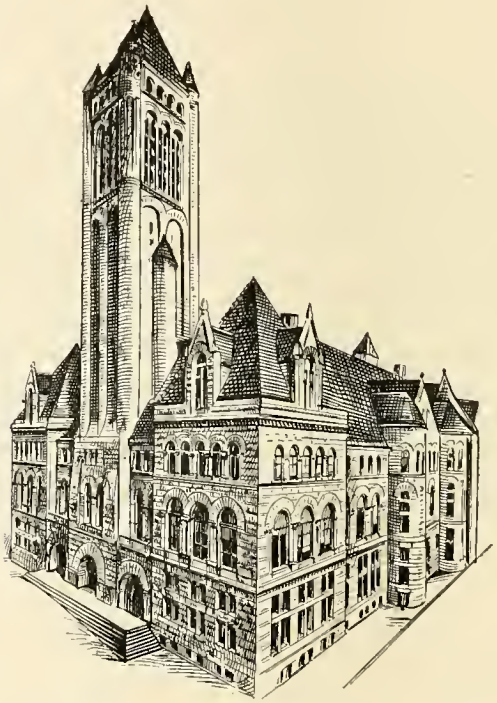
neighboring hills. The elements had darkened their original color somewhat, so that it might easily have been taken for a granite building, but for the fact that the stones scaled badly. Surmounting all was a beautiful dome, supported by columns of stone and the interior being supported by seven Corinthian columns. Above the dome was a lantern the top of which was 148 feet above the pavement. The dome was about thirty-seven feet in diameter at its base. In the center of the building was a rotunda sixty feet in diameter and eighty feet high. Surrounding the rotunda were four court rooms, each forty-five feet square, and easily accessible to these were jury rooms, and other apartments necessary in court business. On the basement floor were ten rooms, twenty-five by thirty-two feet, which were used by the county officers. These rooms were arched with stone and were supposed to be fire-proof, and were as nearly so as the architecture of that day would admit of. In these rooms the public records were kept. The whole effect of the structure was one of strength, simplicity and beauty, and the architect had combined these with the all-important requisite, utility in a remarkable degree. The structure is said to have cost about $200,000.

This court house was a very handsome structure, and began to be admired a great deal by the citizens of Pittsburg as an old building and as one of great architectural beauty. It had been first used in 1841. On Sunday, May 7, 1882, it was destroyed by fire. The county commissioners showed a

commendable spirit of deliberation in building a new one. Consulting with many who knew the needs of the county, they examined the better court houses of the United States and then decided to build on the ground which had been occupied by the old court house. They invited plans and proposals from architects, and selected one who was then and perhaps will long remain the first of American architects, Henry Hobson Richardson, of Boston. The estimated cost of the court house and jail was that they should be built for two and one-half millions of dollars. Norcross Brothers, of Massachusetts, became the builders, and the building was finished and partly in use in August, 1888, and at a total cost that was entirely within the estimate of the architect. To Richardson's skill, genius and great learning in his art the splendid structure is in a great measure due. The highest praise that can be given to the building itself, is that it was built by Richardson, and that he considered it one of the few masterpieces of his life's work, and one of the finest structures, even the finest in its day, in the United States. He did not live to see it entirely completed. In architectural beauty, in completeness of arrangement, and in workmanship it is not surpassed by any structure in the United States. The cost of the buildings, that is of the court house and jail, was $2,450,284.66. In addition to that there was paid $162,200 for the ground occupied by the jail. The county's indebtedness on July 1, 1882, was $3,922,477.01, and many leading citizens opposed the usual methods of bond issuing to raise the additional two and one-half millions with which to build the new buildings. The advice given by them was adopted, and although during the construction of these buildings $800,000 in bonds were issued, in the end the indebtedness was not increased in any sum by their erection. This is remarkable and it is moreover admitted on all sides that there was not an unnecessary nor dishonest dollar spent or paid out in their construction, and that none of the money was misapplied. The jail was the smaller and less important structure, and was finished and ready for use in 1886.

Allegheny county had been formed in 1788, and the court house was finished late in the summer of 1888, just one hundred years after its organization. The date of the act forming the county was September 24, and it therefore suited well to dedicate the new court house on the One Hundredth Anniversary of the county's birth. The two cities and the county united in selecting a committee of one hundred, of which Morrison Foster, of Allegheny City, was chairman, to arrange for a great centennial celebration of three days, September 24, 25 and 26, 1888, during which time the leading feature was to be the dedication of the court house. It was dedicated on September 24, a civic display of the arts and sciences of the cities and county was made on the 25th, and a military display on the 26th. The nights intervening were given over to all kinds of pyrotechnic displays. The weather was splendid, and the program as briefly outlined above, was scarcely deviated from. One object of the parades was to illustrate, as well as possible, the advancements made in the county in a century. It was difficult to represent the modes

of life of a century before, but the difficulty was surmounted as well as possible. Mules and pack-horses laden with merchandise were in the parade, bringing to mind the times when these were the only means of transportation to and from the eastern cities. The early years of last century were illus-



ALLEGHENY COUNTY COURT HOUSE, PITTSBURG

trated by the Conestoga wagons and stage-coaches, while later came the early river crafts and canal boats, all displayed in the streets of the modern city. All these and many other matters were illustrated, and the contrast between the old and the present methods was plainly shown in the street parades. At the first dedicatory exercises on the 24th, Judge Edwin H. Stowe, the oldest judge in commission on the Allegheny county bench, presided, and addresses were made by Judge J. W. F. White, Messrs. D. W. Bruce, Henry Warner and Ex-President Rutherford B. Hayes, who was an invited guest. The beautiful structure was formally turned over to the people by the county commissioners and was accepted on behalf of the citizens by Mr. William M. Darlington, the oldest attorney at the bar. The afternoon meeting was presided over by Hon. James L. Graham. About three thousand school children of the two cities were brought out and sang patriotic songs, and no feature of the three days' services was more enjoyable nor more pleasing to the eye than this. There was scarcely any school at all in Pittsburg in 1788, and the advancement in this direction was indeed marvelous. An-

other feature of the afternoon was an oration by Major A. M. Brown, perhaps the most finished effort of the services. There were several other addresses made, some of which were not on the program. Among the latter was an address by Judge Benjamin Patton. He had held the first court in 1841, in the old court house which had been destroyed by fire in 1882, for he sat on the Allegheny county bench from July 1, 1839, to December, 1850. At the time of the dedication in 1888 he was living in retirement in Ohio, and coming back forty-seven years after he had opened the courts in the old court house, he was indeed an honored if not the honored guest of the occasion. This completed the dedicatory services of the new building. The parade of the 25th surpassed everything of the kind in grandeur that had been seen in Pittsburg up to that time. It began to move at 10:20 a. m., and required three and one-half hours in passing a given point, yet but little more than half of those who were to participate in it could find room to parade at all. The factories of the city were well represented both by innumerable workmen and by displays of their handiwork manufactured in the streets as they passed along. The military procession of the 26th was not so large but it well illustrated the advancements made since the days of Mad Anthony Wayne, when it was considered marvelous that Pittsburg should have a military company of thirty or forty men. All in line of the parade were volunteers for there were no regular United States forces in Pittsburg. The military spirit of the Civil war was fresher then than now. The great lesson of the century and the advancements of the people were very beautifully illustrated.

One of the finest specimens of church architecture in all Western Pennsylvania is the new Calvary Protestant Episcopal Church of the East End, Pittsburg, which was dedicated in the autumn of 1907. It stands on the corner of Shady avenue and Walnut streets, and cost, including the parish house, which is connected with the main edifice, about half a million dollars. It is built of Bedford limestone, even to the topmost portion of the steeple, which is two hundred and thirty-five feet high from the pavement of the street. The corner-stone was laid June 6, 1906, by Bishop Cortlandt Whitehead. The articles placed under this corner-stone included Bible, prayer-book, list of church membership, history of the congregation and copies of all the Pittsburg newspapers. It is regarded as the most beautiful edifice in the Pittsburg diocese, and was designed by a Boston firm of architects. Its exterior is the developed early English general architecture of the thirteenth century. The interior is of the same style of church architecture, a study of the English gothic, as exemplified by Nelty, Whitley and others. Its seating capacity is about sixteen hundred persons. The parish house contains rooms for all meetings except the holy services of the church, and include Sunday-school rooms, pastor's study, society rooms and gymnasium. The regular form of the building proper is seventy by one hundred and ten feet. The interior is finished in marble and precious stones, making the effect one of peculiar magnificence, and is unequalled in the state in many particulars.

Christ Methodist Episcopal Church in the East End, Pittsburg, situated at the corner of Centre and Liberty avenues, erected by the original Christ Church of the down-town district, whose edifice was destroyed by fire in May, 1891, cost $300,000, including the lot upon which it stands. It is a handsomely designed granite structure built on a large plot of ground kept in a most

VIEW OF FOURTH AVENUE

beautiful manner. Its main audience room seats one thousand persons, while its Sunday-school apartments are spacious and divided in a purely modern style. Its various rooms are planned for the comfort and convenience of the numerous societies of the church. The pipe organ, a ten thousand dollar instrument, is one of the finest toned in Western Pennsylvania. The lot was purchased for this church site September 8, 1891, and the contract for the erection of the edifice was signed by Henry Schank, August 13, 1892. The architects and builders were Messrs. Weary and Kramer. The chapel was opened June 10, 1894, and the main auditorium was dedicated from January 6 to 13, 1895. Bishops Foss and Fowler both officiated at the dedicatory services. This with its sister church—Calvary in Allegheny—are the finest buildings of the Methodist Episcopal denomination in Greater Pittsburg district, if not in the state. The decorative features of this building, including the magnificent stained windows and general furnishings, make it one of rare

beauty, while the natural building site is noticeable to every stranger who passes by.

Calvary Methodist Episcopal Church of Allegheny City, built by the congregation which was once a part of the old Christ Church of Pittsburg, is located on the corner of Allegheny and Beech avenues. Its cost exclusive of the land on which it stands, was $234,000, and the lot was valued at $66,000, making the total outlay in building $300,000. The architects were Vrydah & Wolfe, of Kansas City, Missouri, but now residents of Pittsburg. The design is superior, and both the exterior and interior work are among the finest church architectural productions of this country. The material is a superior grade of gray granite. The frescoing and wood carving alone cost about $6,000, and was the handiwork of a noted Boston firm. The three main Tiffany windows of many tinted stained glass, costing from five to seven thousand dollars each, were donated. The front window representing John on the Isle of Patmos, was the gift of James Verner in memory of Bishop Simpson; the side window, representing the Resurrection, was given by C. B. Shea in memory of his wife; the one on the opposite side of the building, representing the Ascension, was given by the board of church trustees in memory of Joseph Horne. These windows were made by the celebrated stained window firm of Tiffany & Company, of New York, and were on public exhibition in that city during the great panic period and the admittance fee of twenty-five cents was given to the suffering poor of that place. The makers said that these three windows were among the choicest ever made by them for American buildings. The seating capacity, including the chapel, is about sixteen hundred. The arrangement of the Sunday-school rooms are unique and superior to any in the city. In the various apartments of the spacious building are found parlors, a pastor's study, class rooms, reception rooms, a kitchen and dining hall, furnished to accommodate three hundred persons. The large pipe organ cost $10,000, and is of an excellent make, while the lesser pipe organ in the chapel would grace the ordinary church. The corner-stone for this structure was laid with ceremonies, May 18, 1893; the chapel was dedicated December 24, 1893; the pipe organ was installed June 6, 1895, and the main building was dedicated June 9 to 16, 1895, Bishop Fowler officiating.

The First Presbyterian Church of Pittsburg, known as the "Mother Church of Pittsburg," now worships in one of the finest edifices in the state. The building history of this church organization, as told in another chapter, dates from the log-cabin church of 1788, then came the brick and stone building of 1804, to which was made an addition in 1816. This served until 1852, when another was erected, which was succeeded by the present magnificent building, erected in 1902-05, at a cost of about $400,000, exclusive of a $26,000 pipe organ. The new building seats about 1,800 persons comfortably. It was built by Arthur Williams' Sons, of Philadephia. Its style was patterned after the old church, but more extensive. It is gothic with two high towers of solid masonry. The material is of hard sandstone, with interior finish in the

rough stone, with no decoration seen, simply the plain stone walls. It stands on the site of the three buildings preceding it, on Sixth avenue near Wood street. The land was originally donated by the Penns, with the condition that it should always be used for church and cemetery purposes. The interior is finished in quarter-round oak, and has immense folding doors thirty feet high, which divide the auditorium from the Sunday-school rooms. When the two rooms are thrown together, the distance from the street entrance to the rear is two hundred feet. There are, in addition to the great audience room, many class rooms for scholars, studies for the pastor, a general library room for visiting ministers, and a general reception room. The building is built in the form of a parallelogram with two high, massive stone towers, which present an imposing front view. The roof is the only part of the building not strictly fire-proof. A number of large arches are apparently supported by two square beams, eighty-four feet long; these came from Oregon and are the longest ever brought to Pittsburg. A range of incandescent lights runs along these beams and arches, throwing the light toward the pulpit, and away from the faces of the audience. Stone stairways lead from the vestibules to the various galleries. The building contains some of the handsomest memorial windows found in America. There are fourteen which cost about $45,000. Many of these represent and honor the memory of leading old families of Pittsburg, and include the names of the Hays, Craigs, Denneys, Laughlins, Speers, Chalfants and others. One window was furnished by Samuel Ewart, which was made in England, and represents the "Tree of Jesse" and "Christ Blessing Little Children." The entire basement of the building is devoted to dining-room, club rooms, library, gymnasium and class rooms. Under one of the towers of the building is a vault in which is deposited the remains of many deceased members of the old-time congregation—four generations of them. Some of the French from old Fort Duquesne were buried within a church-yard, which originally surrounded the lot on which the building stands, and were re-interred in the vault when the cemetery was removed. Under the great arch surmounting the wall, is the door which leads to the crypt and the basement rooms, while on top of the wall, is a stone altar, erected in imitation of the gothic interior of ancient cathedrals. Situated in the midst of towering business houses and office buildings in the heart of Pittsburg, one is reminded of old Trinity Church, at the head of Wall street, New York City. It is said to be inferior to no other Presbyterian edifice in America, except possibly that of Fifth avenue, New York. It was dedicated on the one hundred and twenty-first anniversary of the organization of the society in Pittsburg, which date made the dedication April 16, 1905. Within the old buildings on this site, so replete with interesting historical events, was formed some of the greatest societies of our times. The missionary societies and the university which originated in the original log structure of this congregation, have been treated of elsewhere.

Another beautiful type of church architecture is found in the First United Presbyterian Church, located on Fifth avenue, near Boquet street, Oakland.

This is the third building occupied by this organization in Pittsburg. This is the mother church of the United Presbyterians here, and they celebrated their centennial anniversary November 24, 1901. Its first building was erected in 1813, it having held services in the old court house from 1801 to that date. They built on Cherry alley and Seventh avenue, at an expense of $550, and sold the property in 1897 for $90,000. In 1822 the first building

VIEW OF FIFTH AVENUE

was enlarged and served until 1850. Of the pioneer building, it may be said that it was of the crude old-fashioned style and had unpainted pews. The city having grown up around the first site, like most of the down town churches, this people sought a new home in the residence portion of the city and selected Oakland. The present magnificent structure was begun by breaking ground May 11, 1898; the corner stone was laid with imposing ceremonies July 23 following, and the completed structure was dedicated September 3, 1899. The building cost about $125,000. Unlike the Puritans and most of the early churches of this denomination, this church believed in building as beautiful edifices as money would buy and art provide. Departing from the faith of the fathers, they also added a fine organ, and have decorated the interior of this building in a most elegant manner. Its architecture is a combination of several types, making a design of beauty seldom found in churches of the

present. It is a solid stone structure, with two wide front entrances leading up from Fifth avenue. It has a convex, almost semicircular, front. Instead of a spire, its roof is beautified by a well-fashioned dome and corner towers. The ground upon which it stands is an ideal site, sloping up gradually from the avenue, more than fifty feet, and is surrounded by a smooth carpeting of greensward, and finely made, wide walks leading to either of the two doorways. In midsummer the scene is charming, and made all the more pleasing by rich beds of parking flowers, which almost kiss the surface of the dark stone base of the building between the two entrances. Its interior finish is indeed superb and unique, even for modern church finish. Its pews seat over seven hundred persons, while the immense and well planned Sunday-school rooms hold nearly double this number.

This edifice is regarded as unusually modern in its construction, and its interior decorations and furnishings are of the finest type. The stained glass windows reflecting their myriad vari-colored rays from the sun, present a charming appearance, a delicacy that is seldom seen in churches outside of the largest cities of this country.

In the long history of this church, only six pastors have served the congregation, among whom was Rev. Robert Bruce, a native of Scotland, who a short time after his installation was made principal of the Western University, an office he filled for twenty-three years, after which he established the Duquesne College.

Among the latest of the magnificent church buildings is the Emory Methodist Episcopal Church, situated on North Highland and Rippy streets. In many of its features it excells any other church in the city. It is the first of any in the Methodist denomination of Greater Pittsburg, as well as in the country at large, to be erected on so broad a scale. It has an immense audience room and Sunday-school rooms, and in addition has a fine gymnasium, billiard, pool room and bowling alley; it has also a game room for all sorts of harmless and interesting games, and will be open from early in the morning until late in the evening of each week day, for the benefit of the young people, especially the boys and young men. It is also provided with a spacious dining room and church kitchen, for reception and banquet occasions. This has a music platform for an orchestra and band. Then there are club rooms, reading rooms, committee rooms, bath rooms, a large parlor, a women's parlor, a choir room, an usher's room, church officers' rooms and a pastor's study.

This beautiful and unique building is of expensive brown stone material, and has cost about $300,000. Its audience room seats 1,300 persons, while the Sunday-school rooms seats 1,400. When thrown into one room, the 2,700 people accommodated exceeds the capacity of any other Pittsburg church, save Saint Paul's Cathedral. This church was finally dedicated entirely free of debt on Sunday, October 6, 1907. Previous to this an informal opening was held on Sunday, September 22, and a similar opening followed the fol-

lowing week. Bishop Hamilton and Bishop Andrews delivered the addresses at these openings. The final dedicatory services were held on October 6, by Bishop Spellmeyer.

For a long period the most notable buildings in Pittsburg were the Roman Catholic Cathedral on Grant street and the Trinity Protestant Episcopal Church on Sixth avenue. The building of the new court house by the

THE FRICK BUILDING AND COURT HOUSE

These two great buildings loom across the horizon of every view of Pittsburg. The Frick Building, twenty stories high, located on Fifth Avenue, Grant and Diamond streets, is an artistic and massive triumph of architecture. Opposite on Grant street stands the magnificent Allegheny County Court House and Jail, completed April 17, 1888, at a cost of $2,500,000.

famous Boston architect, Richardson, in 1884, added much to the advancement of general architecture in the city. This building was his master-piece of the many fine public structures he had erected. It did a great deal to inspire the people of Pittsburg to a finer style of architecture. Now Pittsburg has many beautiful structures, rare specimens of private and public buildings. The new Catholic Cathedral on Fifth avenue and Craig street, is undoubtedly the finest structure in the church architecture of Pittsburg, and has been more specifically described in that part of this work which pertains to the Catholic Church.

In school buildings of splendid proportions, may be named the Friendship Park, Alinda, Preparatory, Margaretta, Shakespeare, etc. Among the skyscrapers are the Frick, Oliver, Bessemer, Carnegie and Farmers' National Bank buildings, towering from sixteen to twenty-four stories.

The Pittsburg Chapter of the American Institute of Architecture has a large membership, and its influence as an organization is steadily exerted for the improvement of the profession it represents. What is known as the Pittsburg Architectural Club was organized December, 1896, and has been another promoter of fine architecture in the city. These influences are exerted not only in the erection of public buildings, but are manifest equally at least in the private residences of the city. In the East End part of Pittsburg alone, there are not less than thirty miles of fine residence streets. No city in the United States save New York can boast of so many costly and artistic exteriors and interiors as are found in the residences of Pittsburg. The A. E. W. Painter and the H. Sellers McKee residences in Allegheny, the William N. Frew residence on Fifth avenue, the Wm. B. Schiller residence on Forbes street, the Henry Clay Frick residence on Penn and Homewood avenues, the Francis T. F. Lovejoy residence on Braddock road, the William Flinn residence on North Highland avenue, the residence of the late Charles Lockhart also on North Highland, the residence of Julian Kennedy near the East End entrance to Schenley Park, the residences of Andrew W., Richard B. and W. L. Mellon, to say nothing of the fine residences in Oakmont and in many other parts of the cities, compare favorably with the best residences in any city in the United States, even New York not excepted.

CHAPTER XXX.

The Art Society of Pittsburg and its Work.

More than four score years ago Pittsburg was written of as one of the wealthiest inland cities in the United States. The very nature of its chief products, iron and glass, required large investments and, when properly managed, yielded rich returns in some degree, proportionate to the invested capital. This income enabled the wealthier people of Pittsburg to cultivate the fine arts to a considerable extent, even then surpassing most cities of its size. Naturally the intellectual trend of the younger generation was in this direction. If they did not have the clear sky of Italy at home, they sought it and the old masters across the Atlantic; many of them became adept critics of art and returned richly laden with the choicest art products of Europe, while some adopted art as a profession, and have left work that is highly appreciated on both sides of the Atlantic.

In recent years Pittsburg has advanced more rapidly than any other city in the Union as an art center. Most of the wealthier homes of the city are filled with the best paintings and sculpture from all parts of Europe, few of them indeed there are which are without one or more masterpieces, the product of the best talent of the age. This taste for art has been in a great measure fostered by two influences. The first in the order of its refining effects in the intellectual development of the city is the Art Society of Pittsburg, which was formed in 1873. Prior to this a few cultivated people had met irregularly for the purpose of studying art, hoping hereby to mutually benefit each other.

The other cause or influence which tended so much to make Pittsburg an art center is the munificent donations of Mr. Andrew Carnegie, which have been considered at length in another chapter. These two forces when united in a truly fertile field produced great results, and have done more than any other, or more than all others, to make the city an art center, the greatest in America, save New York and Boston. To illustrate the extent of the advancement of the city in this direction, it may be said that thirty years ago there was scarcely an art collection in Pittsburg which could have been sold in the market for as much as ten thousand dollars, unless it were the Shoen-

berger and Wolf galleries. There were then a few valuable paintings, but even these could be counted on the fingers of one hand, and the values that are attached now to canvases in Pittsburg by the hundred, were unknown here then. Shortly after the formation of the Pittsburg Art Society its members began to arrange for art exhibitions. These were the first in Pittsburg aside from a few private residences, which were occasionally thrown open to immediate friends of the owners and to those who were more or less known as students of art. A full list of the masterpieces of the cities would show that almost every one of the many schools of painting and nearly all of the great painters of the world are represented here.

The Pittsburg Art Society has accomplished much to enhance the interest of fine-arts, music, etc. Some of Pittsburg's artists have achieved wide fame, among these are: John W. Alexander, Charles S. Reinhart, John W. Beatty, George Hetzel, Thomas S. Clark, Clarence M. Jones, A. G. Reinhart, Joseph R. Woodwell, William Wall, Alfred Wall, A. Bryan Wall, Charles Linford, Jasper Lawman, Martin B. Leisser. Among the earliest, well-known artists of Pittsburg were: J. R. Carroll, S. H. Dearbon, A. Bowman and J. R. Lambdin.

In February, 1873, a few personal friends of Prof. M. M. Johnson met with him, and by his invitation, at the Female College (now known as the ~~Pennsylvania~~ Pittsburgh Female College for Women) in Pittsburg, and after two or three informal meetings the Art Society was organized that year. Among those who, together with Professor Johnson, may be called the founders of the Art Society, were Alfred Wall, Charles Linford and John Earle, while among the earliest members were Rev. S. F. Scovel, for several years the president of the society, W. H. Benade, F. A. Noble, J. H. W. Stuckenburg, William Hornblower, J. B. Bittinger, R. F. Alsop, A. Naumburg, Carl Retter, Dr. W. J. Holland and Prof. S. P. Langley.

The fixed purpose of the founders of the society is set forth in Article I of the original constitution, which reads: "The object of the Art Society shall be the cultivation and promotion among the members of a better knowledge of painting and pictures; of music, instrumental and vocal; of literature and science, and of whatever contributes to aesthetic culture."

The early meetings of the Art Society were held at the homes and the studios of the members, and in the smaller halls of the city; pictures by local artists were exhibited and discussed, while the musical programs, interpreted by professional and amateur members, were always of a high character.

For eighteen years, until the incorporation of the society in 1891, its work while constantly broadening did not influence the life of the fast growing city as much as that of the limited number of leading men and women who by reason of fixed business and social position naturally gravitated together. This period, however, reflected the best local efforts in the allied arts, and was truly a time of awakening with hundreds to an appreciation of good

music and good art generally. By its aid in organizing the Academy of Science and Art, the Art Society took the first step towards that broad public work, which has since been its special consideration.

For several years prior to the opening in 1895 of the Pittsburg Carnegie Library, with its Art Gallery and Music Hall, the concerts of the Art Society took on a wholly professional character, the best artists, chamber music organization, and orchestras available in the country contributing. Larger halls were demanded by the growing membership of the society during this period, and until the opening of the Pittsburg Carnegie Library, Music Hall, Library Hall, Old City Hall and the Allegheny Library Hall were used.

Chamber music by local artists has always received special encouragement, and during the period from 1880 to 1892 the quartette and quintette parties organized by Mr. Carl Retter, Mr. George Toerge, Mr. Fred. Toerge and their associates, were an important factor in defining and establishing musical taste.

An artistic epoch was begun in Pittsburg with the dedication in 1895 of Andrew Carnegie's noble gift to education, the Pittsburg Carnegie Library. A beautiful music hall was here provided and a long felt need answered. With the possession by Pittsburg of a music hall, came the incentive to the Art Society to establish a permanent symphony orchestra. Early in 1895 the society announced its plans for an orchestra and public spirited citizens agreed to guarantee its cost for a period of three years. To the enthusiasm and devotion to an art cause of Mr. Charles W. Scovel (son of Rev. S. F. Scovel), who was the representative of the Art Society in raising this guarantee, is largely due this most important single achievement in its history. The first season of the orchestra began in February, 1896, and consisted of ten evening and ten afternoon concerts, each program being given twice. The first conductor was Frederic Archer, whose availability as organist and director of music at Carnegie Library, was an important factor in first establishing the orchestra. Mr. Archer served three seasons. His successor was Victor Herbert, who held the post of conductor during six seasons. He in turn was followed by Emil Paur, who on completing three seasons of service in March, 1907, was elected for a second term of three years.

While the Art Society is the legal and responsible head of the orchestra, its affairs are conducted by a special committee, chosen from among its guarantors, who are also members of the society, and from the first all its concerts have been given in annual series distinct and separate from the series of lectures, concerts, etc., maintained by the Art Society. The plan of a guarantee of the expenses of the Pittsburg Orchestra has been followed from the beginning and those men and women of Pittsburg and Allegheny who as guarantors have made the orchestra possible, constitute a roll of honor that can never be forgotten. The history of the Pittsburg Orchestra shows strict adherence to the highest artistic and educational standard. The element of commercialism is unknown; the question, "Will it pay?", is never asked, and

the tens of thousands of dollars contributed by the guarantors during the twelve years—1896-1908—was tendered in the spirit that a permanent symphony orchestra like the University, Library, Museum and Art Gallery, is an investment whose dividends are recorded only in the ledger of individual and communistic uplift. No artistic influence emanating from Pittsburg has equalled that of the orchestra and largely through it a new spirit has been created which has brought Pittsburg a prestige and respect that existing preeminence in manufacturers did not provide. Not alone in Pittsburg has the high purpose of the Art Society in founding the orchestra been manifest, but the truest kind of missionary work has resulted from the hundreds of concerts given elsewhere throughout a circuit of states more embracing than that regularly visited by any other orchestra of the country. The record of concerts given in twelve seasons ending with March, 1907, is eloquent testimony as to Pittsburg's position as an artistic metropolis: Regular home (Pittsburg) series, 350; special Pittsburg concerts and concerts given outside the city, 374; total, 724.

During the year prior to the opening of the Carnegie Art Galleries in Carnegie Library building in 1895, the Art Society held many art exhibitions, always solely for the encouragement of local artists. With the manifold provision for pictorial art, sculpture and architecture provided by Andrew Carnegie in the Pittsburg Carnegie Library building, the activities of the Art Society in the direction of art exhibitions have naturally been less, but in the past twelve years several exhibitions of the work of local and American artists have been held. It was the loyal and persistent efforts of the Art Society in the direction of pictorial art that undoubtedly influenced Mr. Carnegie to provide the splendid art galleries bearing his name, and the prestige of the annual exhibitions which, beginning with 1895, have been held there, constitute another great influence in establishing Pittsburg as an artistic capitol.

The Art Society in recent years affords its members an annual series of concerts and lectures on musical and art topics. The broader field of its efforts is marked by art exhibitions and the bestowal of prizes for original works in music by local composers. From the society came the impulse to secure for the Carnegie Library, that important department of books, manuscripts, etc., known as the Karl Mertz Musical Library. It is the oldest organized society in Pittsburg, and its thirty-five years of consecutive influence marks in large measure the evolution of what was formerly only an industrial metropolis to a position as leader in the arts that make life beautiful.

CHAPTER XXXI.

Bridges Within the City—The Market Houses.

There are few, if indeed any, cities in this country in which it has been necessary to expend more money for the construction of bridges, than Greater Pittsburg, where two rivers—Allegheny and Monongahela—unite in forming the Ohio. All of the bridges crossing the Monongahela within the city limits, are free from toll charges, while those spanning the waters of the Allegheny have always exacted a toll, which at an early day was two cents for foot passengers, but has now been reduced to one cent for men and free to women during week days, and entirely free to all on Sunday.

Between 1764 and 1819 the only means of crossing these streams, at Pittsburg, was by way of ferries. The first of these, it is believed, was operated from the foot of Ferry street, Pittsburg to the opposite shore, and this was the origin of the name "Ferry street," as known at this time. Early in the nineteenth century a ferry was established from the mouth of Liberty street, called "Jones Ferry." Foot passengers desiring to cross the river employed skiffs, while stock was taken over on flat-boats. Such boats were pushed by means of poles, at low stages of water, and by oars in high water periods. It was about 1840 when the horse ferry was introduced. Blind horses were, as a rule, employed as the motive power. They were made to tramp upon a horizontal wheel, the revolutions of which propelled the boat. A few years later, Captain Erwin established a steam ferry from below the present Point bridge to Penn street, but this was never a success. Subsequently the Jones ferry was abandoned and a steam ferry operated from Saw Mill run to Penn street, and was in use until the building of the Point bridge. There was also a ferry at St. Clair (now Sixth) street. The bridge-building era began in 1810, when charters were procured for bridges at both Smithfield and Sixth streets. These charters, however, lapsed before the bridges were constructed, and in 1816 new charters were secured. The Smithfield bridge was built in 1818, and the Sixth street bridge two years later. These were both wooden structures, and were covered bridges, which made them dismal thoroughfares by night, as they were only dimly lighted up to midnight by oil lamps. These early bridges were operated by stock com-

panies under the direction of bridge commissioners. The style of these bridges was the wooden arch supported on stone piers. The Smithfield bridge, the first of all to be built, was opened to the public in the spring of 1818, and cost $102,000, while the next was the Sixth street structure, opened in 1820, and cost $80,000. Following these came the Hand street bridge, erected in 1837; the Mechanics street bridge, in 1838. The Monongahela river is spanned by the Smithfield bridge, which stood until two of its spans fell which were replaced, and then served until the fire of April 10, 1845, when two of its spans were burned, after which John A. Roebling, the famous suspension bridge builder, erected a suspension bridge on the same site, and this served well until 1885, when it was replaced by the present fine structure. The original Roebling bridge, built in 1845, opened up to travel February, 1846, had a total length of 1,500 feet. It was built with eight spans and cost $55,000. The Sixth street (St. Clair) bridge, built in 1820, stood until 1860, when its successor was built. The Ewalt street bridge, was built in 1868, and a few years later, the Sharpsburg bridge. The Union bridge, at the Point, was erected in 1876, and the one from the Point to the South Side, in 1880. In 1884 the Seventh street bridge was completed. Up to 1843, foot passengers were allowed to cross the waters of the Allegheny on the aqueduct of the old canal, but had to pay a two-cent toll. This aqueduct was located near the site of the present Fort Wayne railroad bridge, at Eleventh street. All of these bridges were of the old style covered structures,

SIXTH STREET BRIDGE AND VIEW OF ALLEGHENY

except the Smithfield street, Sixth and Seventh street bridges, which were of the suspension type.

The present day bridges within the city are as follows: Union, Sixth street, Seventh street, Ninth street, Sixteenth street, Thirtieth street, Forty-

third street, Sharpsburg, Highland Park, Brilliant Cut-off, all of which span the Allegheny river. The Point, Smithfield street, South Tenth street, South Twenty-second street, Glenwood, Brown and the Jones and Lauglin cross the waters of the Monongahela river.

The railroad bridges are: The Fort Wayne, Pittsburg Junction Railway, over the Allegheny; and the Pittsburg and Lake Erie, over the Ohio river.

Among the noted bridges of Greater Pittsburg, perhaps none has more of genuine historic interest connected with it than that of the Sixth street bridge, on which site originally stood the old covered wooden structure built in 1820, and later the great wire suspension bridge, constructed by Colonel John A. Roebling. It was over the old wooden bridge, at this site, that the early stage coaches ran on their route over the Franklin road (now Federal street) to Franklin, Pennsylvania, by way of Butler. It is said that the first attempt at constructing a suspension road bridge was the one swung over Jacobs creek, Westmoreland county, by Jacob Finlay in 1801. It was seventy feet in length, and the plan was patented in 1808. Another was soon built over the Potomac river, above Washington. It was in 1854, that J. A. Roebling spanned the angry waters of Niagara, and six years later he completed the Sixth street bridge in Pittsburg, which was known as the St. Clair bridge. It was opened up for travel May 10, 1860, and was a paying investment from the start. Mr. Roebling gave the following figures concerning this suspension bridge, and they were published at the time:

"Total length, between abutments, 1,037 feet; width of floors, between railings, forty feet; roadway, twenty feet; width of each sidewalk ten feet; diameter of inside cables seven and a half inches; outside cables four and a half inches. There are 1,920 number nine wires in each cable, and the total weight of the cables is 333,000 pounds, while the aggregate strength of the cable is seventy-three hundred tons. The weight of one of the main spans is four hundred and fifty-four tons. The floor area is thirteen thousand square feet. The chains and other portions of the anchors are coated with asphaltum to prevent oxidation."

The earliest Pittsburg horse street cars ran over this bridge. The old wooden structure at this point was made free to women in 1848, and was first lighted by gas in 1837. The suspension bridge built by Roebling in 1860, served until 1893, when the present magnificent structure was built. In 1888, a critical examination of the old bridge proved it to be perfectly sound, and it was only abandoned to make room for one wider and better fitted for the increase of travel. Hence it will be seen that among the earliest suspension bridges in the country, was this Sixth street structure, which stood in the same locality where the first suspension bridge for wagons was constructed.

Of the present structures it may be said that it is really a continuation of Sixth street, over the Allegheny river, to Federal street in Allegheny City, and no more restrictions are placed on the traffic here than on any other portion of the streets. There is no better highway in the entire country than

this bridge, which is of the steel truss type. When modern traffic demanded a larger bridge here, the company secured the services of Theodore Cooper, member of the American Society of Civil Engineers, of New York City, to prepare plans and specifications for a new structure, which would easily admit of the heavy electric street cars to cross without moderation of speed. The resident engineers appointed were W. G. Wilkins and George S. Davison. The plans were duly approved by the secretary of war, and the work was commenced. The false work for the superstructure was begun June 10, 1892. In its construction there was used five hundred thousand feet of pine lumber and eight hundred piles. Baird Brothers, of Pittsburg, were the contractors, and much credit is due to them for the skill with which they handled the gigantic work of building a new bridge on the site of the old suspension structure, without stopping street car traffic but for the period of three hours, the delay being an hour and one-half, at each end of the bridge, while the final change was being affected. The superstructure consists of two spans, each about four hundred and forty feet long. The foot walks are nine feet in width. Two street car tracks take up nine feet from center to center. It is built to support one hundred pounds to the square foot of floor surface, or thirty tons on wheels ten feet apart. Vehicle traffic was delayed from September 17, 1892, to April 1, 1893. In the construction of this bridge, there was used over five thousand cubic yards of masonry and nearly three-quarters of a million feet of timber, in the sub-structure alone. The total width of this bridge is forty-four feet and six inches, and the trusses have an elevation above the road-way of seventy feet in their highest point. Its total length, including abutments, is a little over one thousand feet. It was completed April 1, 1893. It is so strongly built that its vibrations are imperceptible to those who pass over it. During its construction many accidents happened, but none proved fatal. The entire cost of the structure was $560,000.

Could the waters of the Allegheny but speak, what an interesting tale they might unfold. They could dwell on the tens of thousands of persons who have passed over the old ferry; the wooden bridge which stood for forty years; the Roebling wire suspension bridge, which spanned its turbulent waters for more than a third of a century, and the present structure—the great gate-way between the two sections of the city. They could speak of traffic in days of war and adversity, and in days of peace and prosperity. They might relate many incidents lost to us concerning the immense processions which have passed over, including as they have, many world-famed celebrities, dignitaries of Europe and America, who entered Pittsburg over the St. Clair street highways.

The beginning of market-house days in Pittsburg was when the place was incorporated as a borough, April 22, 1794, when the article of borough incorporation required that there should be provided a market-house, which was to be open at least each Wednesday and Saturday, and that a clerk was to be chosen, "who shall have the assize of bread, wine, beer, wood, coals, hay,

corn and other provisions." In 1827, a demand for more enlarged market-house room was made by the citizens, and a committee of the following men was appointed to investigate the matter and report to the council: Messrs. Denny, Eichbaum, Craft, Lowrie, Patterson and Shaler. Nothing seems to have been done in the way of improvement until December, 1832, when a market-house was built on Liberty street, between St. Clair (now Sixth) street and Cecil alley. This cost $1,550, and the contractors who erected it took their pay in the stall rents as they become due. This new building greatly relieved the old cramped quarters, and the interest in market days was much advanced. After the erection of the old court house, a semi-circular market-house, roofed, but open below, was built on the public square in the Diamond, in front of the court house. Later two wings were added—one on each end of the court house lot—each being an extension of the market-house on the lot opposite. While the market-house facilities were none the best in Pittsburg, they excelled those of most other cities of the commonwealth.

The present market-house on Market street, near the old stand at the old city hall, was erected about 1882, and is seventy by one hundred and sixty-nine feet on the ground. It contains one hundred and three inside stalls, and one hundred and one on the outside of the building. The land on which it stands is now estimated to be worth $733,680, and the building at $60,000. In a part of the old city hall building adjoining the market is a spacious room which is free to the farmers and gardeners in which to display and sell their products.

Markets: A table of market prices of Pittsburg for 1813 shows the following: Beef from 2½ to 4 cents per pound; pork 3½; mutton 4; veal 3; venison 3 to 4; bacon 6 to 10; butter 10 to 18; cheese 8 to 12; ducks 25 cents each; geese 33 to 37 cents; turkeys 40 to 75; flour $1.75 to $2.50 per hundred weight, $3.50 to $4.00 per barrel; corn 33 cents per bushel; potatoes 40; turnips 18; Indian meal 40; onions $1.00; white beans $1.00; dried apples and peaches $1.00; green apples and peaches 40 cents; eggs 10 to 18 cents; fresh fish 3 to 6 cents; maple sugar 10 to 12 cents; whisky per gallon, 30 to 40 cents; peach brandy 75 to 80; beer $5 to 7 per barrel; cider $3 to 4; 700 country linen, 40 cents and tow cloth 33 cents per yard; salt $2.50 per bushel.

This was an unusually low price for salt and the advertisement itself says that it was brought from the upper part of New York, through Lake Ontario and Lake Erie, and down French creek and the Allegheny to Pittsburg, all this with but few portages and hence its low price.

The market house in Allegheny City stands on a portion of the Diamond, or public square, at the intersection of Federal and Ohio streets, and this land was reserved for such purpose by the state when the town was originally laid out. By the legislative act of April 3, 1852, the present market house was built and completed January 11, 1866, together with the city hall. The market house is two hundred feet square, one story in height; its cost was $27,461. To this were made further additions and improvements, including a set of

garbage furnaces, which brought the total cost to $33,313. This is one of the best, cleanest kept and most inviting market places within the state of Pennsylvania. The numerous stalls within and without, are provided with all that tends to make a desirable place at which to sell and purchase fresh food and provisions of all kinds. Many of the better class of citizens living in remote parts of Greater Pittsburg, including the East End, patronize this well kept market in preference to those nearer at hand.

CHAPTER XXXII.

The Early Stage and Its Players—The Modern Theater Buildings.

The stage was not as potent as an educator in the early days of Pittsburg as it is now. For years after the incorporation of the city there was no building which was regularly set apart for theatrical performances. The officers and soldiers of Fort Pitt and Fort Lafayette, and others from Eastern or English cities, brought with them a taste for theatrical performances; this they had probably learned in their homes in more advanced communities and when a residence in one of the out-posts of civilization, attended with much leisure for a great part of the year, became necessary, they sought to relieve the monotony of their lives by getting up amateur theatrical performances. In these they were assisted by the younger professional men of the town. There was within the fort a room which was used for public entertainments of various kinds. Capt. Simon Ecuyer wrote to Colonel Bouquet on January 8, 1763, that they had a ball in Fort Pitt every Saturday evening and that it was graced by the presence of the most beautiful ladies of the garrison. This spirit in the lonely fort, calling for entertainment, was the forerunner of the amateur theatrical performances of a later date, and the room in the garrison used as a theater was doubtless the same which had, years before, served as a dancing hall. Some of Shakespeare's plays were enacted there and were probably more highly appreciated than a much more perfect rendition of them would be today.

Shortly after the fort was abandoned and torn away, the first court house was built. The soldiers had gone to watch over less peaceful communities, but they left behind them the love of public entertainment. "The Poor Soldier" and "The Apprentice" were enacted in the court house in February, 1803, by the young lawyers and physicians of the town. The performance began at 6:30 P. M. and must have been well attended for, "by request," the latter was repeated, the proceeds being for some benevolent purpose. Occasionly in those days a traveling actor came along who, for a small sum, would teach the young people of Pittsburg to enact certain plays, and there is considerable evidence that the ones selected were of a high grade and were patronized and thoroughly appreciated by the early Pittsburgers.

Left somewhat to themselves in those early days, because of the poor facilities for traveling, the average Pittsburger sought every possible method

of home entertainment. There were in 1808 two dramatic societies in Pittsburg that were important enough to receive notice in the newspapers. The one was composed of law students and young lawyers and the other was composed of mechanics. The object of these societies was to study the poets and dramatic literature and to give public performances in the court house. William Wilkins, who afterwards became so eminent in the nation, was a member of and took a leading part in the entertainments given by these societies. There was no way for theatrical companies from the East to reach Pittsburg prior to 1817, save by the state road, which was scarcely passable for a train of pack horses, yet they came even as early as 1808 and performed in a small room, which was secured for them when the court room was occupied. In 1812 a third dramatic society called the Thespian Society was organized among the young men and young women of Pittsburg. Their object was similar to that of the other societies. By this time a man named Peters had a room, which was used for such purposes, and in it was given a musical entertainment called "Variety or the Songsters' Jubilee" and a play entitled "The Exile of Erin." These entertainments were gotten up by an actor named Webster, who had perhaps seen better days in Europe and in the eastern cities. The price of admission was fifty and seventy-five cents. In February, 1813, "The Fatal Marriage," and "Sprigs of Laurel or the Rival Soldiers" were enacted by the Thespian Society. They must have been popular, for still later they enacted "She Stoops to Conquer." "Romeo and Juliet," "Love Laughs at Locksmiths," "The Merchant of Venice," and perhaps a dozen other plays whose titles are not now known to the stage going or literary people. The society numbered among its members the brightest and best bred young people of the city, most of whom took part in each performance. They were given in a room on Wood street, in a building known as Masonic Hall. The society boasted of a board of managers and was kept up many years. Alexander Brackenridge was its president. They played for the benefit of deserving organizations, notably the Eagle Fire Company in 1819. When the hard times of 1817 came the young people of Pittsburg, composed largely of the other dramatic societies, organized the Dramatic Benevolent Society. Their purpose was to give performances for the benefit of the poor of the city. They gave many of these and always played to full houses and by them they raised, for that day, a great deal of money. These matters, apparently unimportant in the city's history, are noted with great pleasure, for they show not only the trend of public thought in this direction in that day, but that the young society people were given to charity even in the early days of Pittsburg.

In 1826, when Pittsburg had been ten years a city and had a population of at least ten thousand, a movement was set on foot among the prominent men of the city to build a theater. The Pennsylvania canal had not only increased the population but had made it easier for prominent actors to reach the city and bring with them their wardrobes which were difficult to transport by stage coach. The largest subscriber was James A. Stevenson, who was then a

member of congress; he gave $500 or more, and was selected by his associates to purchase a lot on which to erect the theater. The lot was on Fifth street and was purchased from William McKnight. The other subscribers were: William McKnight, $200; Way & Company, $200; Benjamin Darlington, $200; Alexander Johnson, $200; and James S. Craft, $500. Stevenson was twice badly defeated for re-election to congress, and having taken the theater property in his own name, refused to convey it or an interest in it to his partners. The matter was taken to court in order to compel him to convey the property as he was in honor bound to do. The building was finally completed and in 1832 George A. Cook, Robert Scheyer, Thomas S. Clark, Samuel Rosebury, Robert Riddle, Samuel Fahnestock, Cornelius Darragh, W. W. Fetterman, M. B. Miltenberger, C. F. Spang, R. H. Douthett and W. M. Carlisle were chosen as managers of the theater for the year. The scenery was somewhat pretentious and the building was a complete one for that day. It was completed in the early fall of 1833 and was leased to F. C. Wemyss, who took great pains to secure noted actors and actresses to appear in the new theater. His labors were attended with success for he secured among other men and women of note, Edwin Forrest, the greatest of all players. It is doubtful whether there were ever better delineations of Shakespeare's characters in Pittsburg than those of Forrest at that time. It was opened September 2, 1833, and occupied lots now numbered 306 to 310 Fifth avenue. The *Mercury* gives the following description of this theater when it was opened, which may interest modern Pittsburgers. "The Pittsburg theater is a neat two story building. The front is fifty-seven feet, depth one hundred and thirty. The interior of this theater is arranged to combine the greatest degree of elegance and convenience and will safely vie with any other in the Union. The boxes, which are of two tiers, are of rose color, ornamented with gold work bearing a shield upon which are emblazoned the arms of the United States. The seats are covered with crimson, edged with velvet and handsomely studed with brass nails. The theater is lighted with eighteen splendid chandeliers hung at proper intervals. The proscenium represents the Pennsylvania arms and there are splendid draperies about the stage doors and the salons, which are extensive and spacious. The scenery, painted by J. R. Smith, is of the most magnificent description and the wardrobes are all new and convenient." This building with some internal changes, stood until 1878. It was well arranged for its day. There were five exits to be used in time of fire.

Complaints appeared in the newspapers against the management in 1838, the patrons asserting that the manager took the "fips and levies," of the people without giving them in return what they were entitled to. It was also alleged that the Pittsburg theater was made a "drill ground for the awkward squad," and that as soon as a boy has "learned when to speak low and when loud, when to roll up his eyes, and when to clasp the hands expressive of love, anguish, etc., he is packed up and directed to the Chestnut Street Theater and Johnny Raw is taken in stead." Nevertheless, the house was kept open under

Wemyss' management for eight years. Under his management came the ablest actors of Europe and America, and from that day to this Pittsburg theater goers have had the opportunity of seeing the most accomplished artists of the world. Nay more, there has scarcely been an actor of note in Europe or America since 1833, who has not appeared time and again in Pittsburg. An eastern manager named Dinneford took the control of the Pittsburg theater in October, 1841, and reopened it with a stock company in "The Lady of Lyons" after which, "School for Scandal," "Much Ado About Nothing" and many other high grade plays were enacted. Wemyss had undoubtedly grown careless, particularly in the selection of his theatrical companies, and the interest of Pittsburg people had somewhat lagged. Under the Dinneford's management the legitimate drama was revived. The stock company remained in Pittsburg about two months when Mr. Dinneford took it to Cincinnati where they again repeated their Pittsburg repertoire with great success. Both the legitimate drama and music were greatly patronized and a taste for them advanced in the forties in Pittsburg. In 1845 the "Nightingale Ethiopian Opera Company" was formed from Pittsburg talent, who were of a high order. They gave many entertainments in Masonic Hall, which had been enlarged and was the largest hall in the city. Stephen C. Foster, who is referred to elsewhere in these pages, was just then beginning to publish his melodies and many of them were sung first in Pittsburg by this company. This really splendid home talent company, singing the songs of a young Pittsburg writer, so engaged the attention of the Pittsburg people that many more important Shakesperian plays at the Pittsburg theater were neglected. In this way the home talent was probably an injury to the city, for able artists trained in the rendition of Shakespearian tragedies undoubtedly played to empty seats.

Later in the forties there must have been a revival of the Shakespearian plays for in April, 1846, Mr. John Oxley produced his inimitable "Shylock" and appeared later in other classic characters. Mr. A. A. Adams, a great, though not the greatest tragedian of his day, enacted "King Henry IV," "Macbeth" and many others of high character. The Pittsburg critics seemed to like him best in the delineations of Macbeth; indeed they called him faultless in that character. This was in April, while in May, Junius Brutus Booth, long years afterwards known throughout the dramatic and literary world as the Elder Booth because of his brilliant son Edwin, came to Pittsburg with a repertoire which included "King Lear" and "Richard III." In the same year James E. Murdock played "Hamlet," "Claude Melnote," etc. Murdock was supported by such talent as Miss Porter, Mr. Lewis as Macbeth, Mr. Morris as Macduff, etc. Murdock captured the Pittsburg people and held them till his death. He was a man of great versatility and died so recently (1893) that he is recalled distinctly by many now living in the city. He was able to play Hamlet almost as artistically as Edwin Forrest or the Elder Booth and could the following evening, keep the same audience in a continuous uproar

by his talent as a comedian; in this role he could surpass, if he wished, the coarseness of Barney Williams. He was noted as an elocutionist and it was he who first read Sheridan's Ride a few minutes after it had been handed him in manuscript by the author, T. Buchanan Read. Nor was comedy neglected during this period of seeming partiality for tragedy. Pittsburg audiences were perhaps more pleased with J. S. Silsbee in the character of "Sam Slick" than with any other comedian. Then came also such comedians as Owen Mestayer, W. M. Foster and Barney Williams. A great player who was equally as great a favorite in Pittsburg was Mr. James Henry Hackett, an Englishman, who excelled not only as a tragedian but as a comedian as well. Many in after years regarded him as the greatest in Falstaff who ever appeared in Pittsburg. Henry Placide, another comedian of very highest rank, came also in 1848.

Matilda Herron, as a young girl, made her first appearance on the stage in 1848 in Pittsburg, appearing as "Camille." The newspapers spoke most kindly of her maiden effort and promised her a great career on the stage, and in this they gauged her talents correctly.

Anderson was then the English master of tragedy and gave his rendition of "Othello" in Pittsburg in 1848; with him was Oxley as "Iago." The latter was also a favorite in Pittsburg. The people thought the only living actor, who surpassed or even equalled him, was Junius Brutus Booth. Edwin Forrest was in Pittsburg the same year and with him were Oxley and Miss Porter. He played "Virginius" and "Othello." These characters were probably never portrayed as ably in Pittsburg as they were by him on this occasion. He was then forty-two years old. Pittsburg people thought his work was never equalled except by Forrest himself.

Fanny Wallack, with Moorehouse, played "As You Like It," "Romeo and Juliet" and rendered them in an inimitable style, which was purely her own and which captivated the Pittsburg audiences, as but few women have done. Junius Brutus Booth, with a splendid support, appeared in "Hamlet" and "Richard III," and with him was his son, Edwin, then a precocious lad of sixteen, playing minor parts, but who was soon to take the proud place earned by his father in the hearts of the theater going and intelligent people of the civilized world. In 1850 Charlotte Cushman played "The Stranger," "Macbeth," "As You Like It," "Lady of Lyons," "Henry VIII," "Guy Mannering" and others of equal weight. But few women on the stage have been treated with the courtesy and respect which Pittsburg people showed her. Bred from one of the best families, herself a woman of high character and brilliant attainments on the stage, she was received and made welcome in some of the most exclusive homes in the city.

The Pittsburg theater was by this time in need of repairs and this was most excellently done by Joseph C. Foster, who leased it for a term of years. About this time it began to be known as "Old Drury." The new manager thought there had been too much tragedy and he therefore introduced lighter

and more popular comedies. The scenic effects which he produced surpassed anything in that line that had been seen in Pittsburg and were equal to the finest in America. All this brought almost undreamed of success to "Old Drury," but the cities had increased beyond the capacity of one play house and while comedy held forth in another theater, Miss Jean M. Davenport appeared first in the city as "Pauline" in the "Lady of Lyons." She was supported by Charles Foster as "Claude Melnotte." Later she played "Much Ado About Nothing," "Charlotte Corday" and others of heavy cast. By this time there were five halls in Pittsburg all of which were splendid for their day. Masonic Hall had been enlarged and was now the largest in Pittsburg; Wilkins Hall, Lafayette Hall and the Antheneum were all large auditoriums and equipped in a style that was considered magnificent in that day, while the Pittsburg theater equalled them almost in size and surpassed them in grandeur.

In the spring of 1851, under a contract with the great showman, P. T. Barnum, the celebrated singer, Jenny Lind, made a tour of the United States, singing in more than a hundred cities, the greater part of which were under Mr. Barnum's management. It was a great undertaking, outrivaling any other such contracts before heard of. Among the cities favored by this sweet songster was Pittsburg, in which city she appeared April 26, 1851. She came by steamer from Wheeling, West Virginia; put up at the Monongahela house, and sang in the Masonic Hall, the largest in the city, which had been specially fitted for her coming. She was greeted with an overflowing house, and none who were fortunate enough to hear her unusually sweet, well-trained voice, could ever forget her. The admission tickets were sold at auction (quite common in those days) and the sale, which was held between ten and eleven o'clock the morning before the concert, was personally conducted by the famous Barnum, who had a licensed autioneer engaged to sell them. On account of the auctioneer, Mr. Davis, being somewhat tardy, Mr. Barnum secured a bystander, who was also an auctioneer, and whose name was spelled "Lynd." He sold the first ticket, after the announcement having been made by Mr. Barnum that the amount bid was to be the premium paid in excess of the par value, which for each ticket in the house was fixed at five dollars. This ticket was sold to a returned Californian at fifty dollars—"too cheap for the first ticket to hear my name-sake," remarked Mr. Lynd. The regular auctioneer then sold the tickets, something, over one thousand in number. The average price paid was seven dollars. The entertainment was a delightful one; those who supported Jenny Lind were each artists of note. The only thing to mar the greeting of the famous singer, was the rougher element, who were unable to gain entrance to the hall, and who clamored to see her. They kept up a terrible hubbub on the outside of the building, greatly to the annoyance of the singer and to the disgust of the respectable people. At the close of the concert, this baser element still clamored to see the celebrity and so boisterous were they that she feared to leave the hall. She and the com-

pany, having put out the lights, remained there until near midnight, thinking that would cause the unruly crowd to leave. But not so, and finally she made her way out at a back way and under the care of a drayman, Mr. Keating, after tearing off a plank fence panel made her escape and by a circuitous route, through Virgin alley, thence to Cherry alley, to Grant street, down Grant to Water street, gained entrance to the Monongahela house, unobserved by the rabble. The daily papers of Cincinnati and other rival cities made much ado about this unfortunate affair, indeed magnified it ten-fold, but were duly called down by the Pittsburg papers. This incident was mentioned at some length in the book published of Miss Lind's tour through America and Cuba. The comments are not highly complimentary to the general appearance of the "Smoky City," its streets, its atmosphere and its people. She had been booked for a second night at Pittsburg, but after this episode she would not consent to appear again. On Sunday morning following her concert, she went to Baltimore.

For many years the abolition of slavery was advocated by many Pittsburgers, this indeed, being one of its strongholds in the North. As a result, when "Uncle Tom's Cabin" was first played here in 1854, the largest hall could not accommodate the excited people who turned out to patronize it. It was popular for many years, and probably drew larger audiences than any other troupe until slavery was abolished. Adelina Patti sang in Pittsburg first in March, 1856, when she was but thirteen years old. She sang in the Masonic Hall and even then her singing was compared with the music of Jenny Lind. The year following brought Edwin Booth, not, as we have indicated above, in his first appearance in Pittsburg, but this was his first appearance as the leading man. He was then twenty-four years old. His father, who had enraptured the Pittsburg audiences for twenty years with his matchless playing, had passed away and his mantle had fallen on the gifted son. He enacted the characters of "King Lear," "Hamlet," "Iago," "Othello," etc. Like his father, he became a great favorite in Pittsburg and his popularity never waned. Until his death, nearly forty years after, he drew larger audiences in Pittsburg than any tragedian of his day. In 1857 came John Drew, more famous than any other man of the century as an Irish comedian. Pittsburg had become accustomed to the Irishman in the railroad building of the early fifties, and the city was in the proper spirit to be taken by storm by such an actor as Drew.

In 1857 J. C. Foster retired from the management of the Pittsburg theater and built the new National theater, which was opened the following year. It was capable of seating 1,600 people. It was very popular and brought such talent as Charlotte Cushman, J. E. McDonald, John Henry Hackett, James Bennett and many others of note.

The Grand Opera House, on Fifth avenue, between Smithfield and Wood streets, is the successor to the old Pittsburg theater, before mentioned, later known as the Grand theater, which last play-house ran down its curtains for the last time, in May, 1903. It was built in 1870, with M. W. Cunning as its

first manager. Its first play was "Ruy Blas" with Charles Fletcher, who first played "Monte Cristo" in America. It was here that Edwin Booth often played and during a week's engagement had a dispute over a gas bill with the manager, Newton Gotthold. In the midst of the week's performance the gas company shut off the gas, but through the tact of the manager's son, the now famous actor, Charles Gotthold, several locomotive head-lights were secured from the Pennsylvania railroad round house, and these being placed at different points within the building, sufficient light was afforded to continue the week's engagement.

Among those who played in this theater were: Patti, Parepa Rosa, Sarah Bernhardt, Nordica, John McCullough, Edwin Booth, Lawrence Barrett, Maggie Mitchell, Fanny Davenport, etc. Among the distinguished platform speaker who appeared in this building, were: James G. Blaine, Roscoe Conkling, Thomas A. Hendricks, Schuyler Colfax, U. S. Grant, James A. Garfield, Mark Twain, etc.

This building was remodeled by the present manager, Harry Davis, on modern plans and named the Grand Opera House. Its seating capacity is three thousand. It has a frontage and entrance on Fifth avenue of thirty-three feet. It is on very valuable land and is a highly popular play-house. At the time of the burning of the old Avenue theatre, June 2, 1905, the Grand Opera House was injured about its front entrance to the extent of ten thousand dollars. The old Avenue theater was near the Grand Opera House, and at the time of the fire there was a matinee being presented and had it not been for strategy on the part of the firemen and police departments, working in union with the stage management, who kept the fact of the fire raging in the near by building from the well filled house, probably the horrors of the Iroquois theater of Chicago would have been repeated in Pittsburg. By quietly notifying those in the street end of the building, first, and having them move out as rapidly as possible without attracting the attention of those farther forward, the house was finally emptied, without a stampede or injury to a single person. The musicians and stage men, attracted the attention of the audience nearest the stage, until the house was nearly cleared, whereupon the manager announced that there being a fire, the anxiety of the audience to see where it was, so disturbed the players that the remnant of the house would be dismissed. The troupe, which was playing energetically, removed their scenery and effects to the Alvin theater, on Sixth street, before the hour of the evening entertainment, and greeted their audience in that building instead of the one which had been partially destroyed the afternoon before. The old Avenue theater was eighty-five by one hundred and twenty feet and was totally ruined.

Among the numerous up-to-date theaters of Greater Pittsburg, the finest and most modern in appointment is the Nixon, situated on Sixth avenue and Cherry alley. It was erected and opened in 1903. Its cost, including the $600,000 lot on which it stands, was a million and a half dollars. It is really among the finest play-houses in America. Its architect was Benjamin H.

Marshall, of Chicago. For his skill and ability in theater building he has been called the "wizard" architect and builder. It was erected by a stock company of which S. F. Nixon was a member. It is rare in beauty, combining architectural dignity and conveniences of unusual order. It has every known modern appliance for safety and scenic effect. It stands as one of the evidences of Pittsburg's prosperity and growing culture. In it the architect has broken away from all old styles and methods in theater building, having adopted the strictly metropolitan usages, as seen in our greatest American cities. It stands on a lot one hundred and twenty-two by one hundred and seventy-two feet in dimension, hence is among the largest in the country, and is the widest in the United States. The stage is forty-seven feet deep, by eighty-six wide. The ornamentation is new and purely original in its design, though it leans toward the French renaissance architecture. While its exterior is attractive, its chief richness of beauty is within, where marble and pure gold leaf abound. The special feature of the theater, however, is its original ideas, as seen in the rising promenade in the spacious auditorium, by which patrons of the play-house may enter the first balcony, or dress circle, and take seats without ascending a single step of staircasing, which elimination is almost paradoxical in architectural plans. It is so arranged that one may ride from his home in an automobile, and enter the balcony. This has been done on different occasions, to show the principle, but this feature is not of course for practical use. The incline of the entrance is very easy of access, a great improvement over other styles. Its seating capacity is twenty-two hundred people. A second unique arrangement, is the overhanging balcony of thirty-two feet, built on the cantilever principle—the first of its kind in the world. This feature puts every seat in the balcony within line of the stage-view, and at the same time, brings that portion of the house extraordinarily close to the stage, which makes that part of the house as desirable as any other. The house has one tier of boxes, five in a row on each side; these have superb silk draperies in fancy colors. Genuine marble walls rise to a goodly height. The caps of the marble columns and pilasters are covered with gold, giving a brilliant finish to the ceiling, made to imitate mother-of-pearl. Gold leaf and handsome tints and shades, make beautiful the whole entire surroundings. The curtains are superb; the main one—the asbestos—has painted on it a charming landscape view of Yellowstone Falls, while the act-curtain is made of a scene called "Love's Land." There are thirty-two dressing rooms, all good parlors of themselves, besides smoking rooms, toilets, etc. Every floor has five fire exits, with double doors. So novel was this theater in its construction, that letters and cablegrams came pouring in from all parts of the country, and from play-house builders in European countries, asking about its make-up and workings generally. The opening of this magnificent theater occurred December 7, 1903, at which dedication many were present from abroad. The play presented was one very familiar to old theatergoing Pittsburgers, who saw it in much less palatial houses than the Nixon—the play was "Erminie,"

presented by Francis Wilson, who told the ten thousand dollar audience, that he had never been in so fine a theater in his life as an actor.

The Duquesne theater built in 1884, is located on Penn avenue, near Sixth street. It has a seating capacity of sixteen hundred. It is wholly a brick structure and was thoroughly remodeled in the summer of 1907. Its opening after the change was September 2, 1907.

The Academy of Music is among the older play-houses of the city and entertained its tens of thousands since 1877, when it was first opened. It is a brick building on Liberty, between Ninth and Wood streets; its capacity for seating is 2,400. Its present manager is Harry Williams, who succeeded his father as manager. For a number of years this theater was the best play-house in Pittsburg.

The East End theater was built in 1895 by Ed. Wilt, and opened with Ward and James. It was operated four or five years, as the "East End" theater by different managers. In 1890, E. J. McCollough leased it for five years, and opened it as the Empire theater; he was succeeded by Charles Blaney, who bought it, and changed the name to "Blaney's Theater," and it is now operated under the management of N. C. Wagner, of New York City. This is a brick building, finely constructed on modern theater plans; it is eighty by two hundred and ten feet, with a stage forty by eighty feet. The whole is fire proof, and well arranged. Its seating capacity is 2,200. Its location is on Collins, near Penn avenue. During the present management nearly every performance is greeted by a house equal to its full seating capacity, thus showing the management to be appreciated by the East End theater-going people.

The largest auditorium in Pittsburg is the Duquesne Garden, which is on Craig street, and was produced by rebuilding the old Craig street street car barns, in the summer of 1898, preparatory to receiving and entertaining the immense throng of visiting Knights Templar, which order met in annual conclave in Pittsburg in October of that year. This is a brick structure one hundred and sixty by three hundred and sixty feet. It is lighted with three thousand incandescent lamps, and easily seats eight thousand people in the main hall, while the dance floor accommodates seven thousand more, making it the largest hall in the entire state. The total number of people who have found seats and standing room in this amphitheater is said to be sixteen thousand. It is used for greater gatherings of all sorts, including summer and winter expositions, shows, mass meetings, receptions, conventions, etc.

The Bijou theater, which succeeded the old Library Association Hall, on Penn, near Sixth street, was opened as the Bijou theater, September 6, 1886. It is a brick structure, eighty-four by one hundred and twenty-four feet, and has a seating capacity of 3,561, galleries and all. It is owned by Gulick & Company, and managed by Oren Gulick, who also conducts the Alvin theater, on Sixth street. These are popular play-houses and present many of the modern plays to large audiences.

The Alvin was built about 1891; is on Sixth street, between Duquesne Way and Penn avenue. It seats 2,500 and is modern in its appointments, throughout. When first opened it was the finest theater building in the city.

Pittsburg has always patronized, most liberally, the better talent on the stage. The favorite actor among the theater-goers, for many years, was Joseph Jefferson. Their manner of applauding his between-act-addresses, thoroughly demonstrated their affection for him. In one of his last appearances, he spoke of having played before the parents and grandparents of those who greeted him that night. But this great admiration for Rip Van Winkle did not prevent them from most thoroughly appreciating Edwin Booth. He undoubtedly drew the most cultured people of the city and fairly rivaled Jefferson in popular esteem. John McCullough as Virginius, and Lawrence Barrett as Hamlet or Cassius, stood next to these in the opinion of the people of Pittsburg, as manifested by their attendance. Salvini and Sir Henry Irving were also most highly appreciated. The latter never came to America without playing at least a week in Pittsburg, and neither of them were ever greeted by small audiences. Many others less known on the American stage, have been most kindly received in Pittsburg. With such theaters as we have described, and with a people who appreciate in the highest degree the histrionic talent of the players we have mentioned, Pittsburg can certainly, with reason, lay claim to the credit of being a great "show town."

CHAPTER XXXIII.

Leading Men of Pittsburg's Past History.

James O'Hara was born in Ireland in 1752 and came to America about 1772, arriving in Philadelphia where, after a short stay, he was employed by a firm to go to Western Virginia to engage in trading with the Indians. In this way he met Devereux Smith and Ephraim Douglas, of Pittsburg. Before coming to America he was in the British army, serving three years as ensign in the Coldstream Guards, and was naturally selected to take command of a company when the Revolution began. His first service in the Revolution was in the Southwest, part of the time with the army of George Rogers Clark, where he was promoted to a captaincy. He was sent to Washington's headquarters by General Brodhead bearing letters urgently requesting supplies of clothing for the soldiers of the West. He was also appointed assistant quartermaster in 1781, and was afterwards in the battle of Cowpens with General Morgan, and at Guilford Court House with General Greene. He continued with the army till July, 1783. Then he was married to a Scotch girl, Mary Carson, and came to Pittsburg in a wagon, to live in a log house. She was a woman of some taste, for she introduced carpets in Pittsburg which greatly astonished the western people who thought they were coverlets, which she had, through a spirit of extravagance, spread on the floor. But Captain O'Hara also brought with him from the Revolution a taste for military life, and this was shown in his connection with the expedition under Generals Harmar, St. Clair and Wayne against the Indians in 1790, 1791 and 1794 respectively. In St. Clair's and Wayne's army he was quartermaster-general and retained the position till May, 1796, though serving for the last two years very much against his own wishes.

We have often had occasion to refer to him as the pioneer in the early industries of Pittsburg. Many of them were small when compared with the business of the present, but they were immense undertakings for that day. To illustrate, he built boats in Pittsburg, loaded them with products for the Southwest and took them to New Orleans. There he fitted them out with masts and sails, loaded them with cotton and sent them to Liverpool, where after disposing of his cargo, he reshipped, this time laden with manufactured

articles for New York, Philadelphia, etc., and finally came back to the cotton markets of the South again.

His name is perhaps more indelibly written than that of any other in the pioneer history of Pittsburg. As we have seen, he was the first to engage, in company with Isaac Craig, in the business of glass manufacturing in Pittsburg in 1796. In that year, while he was filling the office of Quartermaster-General of the army under Washington, he visited Niagara and there conceived the idea that Oneida salt could be carried to Lake Erie and thence, by the way of French creek, could be shipped to Pittsburg cheaper than it could be transferred from Baltimore on pack horses. This was a very important discovery for the city of Pittsburg, for as we have before said, the pioneers of Western Pennsylvania were always greatly in need of salt. When he settled in Pittsburg he became the prime mover in almost every business project for the benefit of the city. He was well acquainted with Washington, having served under him as Quartermaster-General of the army brought west to put down the Whiskey Insurrection. He was presidential elector in 1789 and cast his vote for Washington. His name is familiar to the Pittsburgers of the present generation, not so much because of his connection with the early industries of the city as because he was the founder of a large estate, a branch of which, the Schenley Estate, has contributed greatly to the cities' later glory. He had a natural talent for acquiring and holding lands. The three acres at the point between the old fort and the Allegheny river, which were laid out in lots by Craig and Bayard, were sold to General O'Hara, who also purchased many lots directly from the Penns in other parts of Pittsburg. He purchased from the Penns a large tract of land, a part of the Manor of Pittsburg, extending from Two Mile run on the Allegheny river to the Monongahela. He purchased several lots in Allegheny City when it was laid out by the state, and still another large tract of land on the South Side, it being the western part of the Manor of Pittsburg. A third body of land in "Guyasutta Plan," on the Allegheny river above the present town of Sharpsburg, was purchased by him and is yet owned by his descendants, the Darlingtons. He made many other less important purchases in various sections. These tracts afterwards became very valuable, though they were not considered of great value when he purchased them.

There is no doubt but that he was one of the few far sighted men whom the city has yet produced. Like Washington, he had faith in the future greatness of the Fork of the Ohio, and with his unusual foresight he purchased these lands, believing that by the future growth and prosperity of the city, they would greatly enrich his descendants. While he wisely held this real estate until his death, he did not do so without many privations. The lands were unproductive and the General's last days were those of the great financial depression which followed the war with England after its close in 1815. They were years of poverty in one sense to him, for, with all his possessions, he could realize but little from them without sacrificing them entirely. Money

was never scarcer than it was in 1817. The industries and enterprises of Pittsburg, infantile though they were, were completely paralyzed by the panic. No one would purchase unimproved property to build on, and but few were able to meet their regular obligations. General O'Hara had interests in almost all the industries and commerce of Pittsburg, most of which required ready money, and the stagnation in business brought about by the Embargo, and still later by the panic following the war of 1812, drove him almost to the verge of bankruptcy. This greatly perplexed him in his declining years. It is said, indeed, that but for the timely assistance of James Ross, a lawyer of high standing, who has been referred to elsewhere, his property would have passed from him under the sheriff's hammer. Money was then not infrequently bringing as much as 25 and 30 per cent. per year, while Ross, though himself a money lender, had deep-seated, conscientious principles about usury. He therefore helped O'Hara, as he did all others, so far as he was able, at the legal interest of six per cent., thus tiding him over the difficulty and enabling him in his will to devise a large estate free from encumberances, or practically so. Better times, however, came in 1818 and 1819 before O'Hara's death. General O'Hara died December 21, 1819, and, as indicated in his will, left three children, one son James and two daughters named respectively Mary and Elizabeth. He divided his estate about equally between them, though the unjust tendency of that day was much more prevalent then than it is now, namely, to give a son, and particularly an only son, an unduly large portion of the patrimony. He even distinguished between valuable corner lots in Pittsburg and other lots of less value, or of less prospective value. so that his children might receive an equal share of both kinds. The land on the Allegheny was devised to his daughter, Elizabeth, while that on the Monongahela was devised to Mary. Elizabeth married Harmar Denny, son of Ebenezer Denny and Nancy Wilkins, while Mary married William Croghan, Jr., who was a brother of General George Croghan, but who was no relation to Col. George Croghan, who figures so largely in Pittsburg's early difficulties with the Indians.

William Croghan, Jr., was a son of Major William Croghan of the Revolutionary army and was born January 2, 1795. He was brought up in Louisville, Kentucky. His mother was a sister of Gen. George Rogers Clarke, and the boy grew to be a remarkably handsome man of fine form and polished manners. A favorite outlet for the river towns of the Ohio in steam-boat days was Pittsburg, and on a visit here he chanced to meet the O'Hara family. In 1821 the daughter Mary and William Croghan, Jr., were married. For some years after their marriage they lived near Louisville, where two children, a son and a daughter, were born. Mary (O'Hara) Croghan died October 25, 1827, and her only son, William, died April 25, 1828. After the death of his wife William Croghan, Jr., removed to Pittsburg and was admitted to the Allegheny county bar on May 2, 1835, when he was forty years old, he having practiced his profession previous to this time in Louisville. Mary E. Croghan

was the only heir and she eventually inherited the whole of her mother's estate. She was born at Locust Grove, near Louisville, on April 27, 1826, and spent the first eight or nine years of her life there. On his removal to Pittsburg, her father established a residence and country seat called "Picnic," which commanded a view of the three rivers and was one of the finest and most beautiful places in this community. There the only daughter spent several years, but without a mother and with no young folks in the house, her home life was not and could scarcely be made attractive to her. It was this loneliness which induced her father to send her to a school for girls, a very fashionable one on Staten Island, New York, conducted by Mrs. Macleod. The school had been patronized by the wealthiest and most exclusive families of the metropolis, mainly because it was under the care of the highly accomplished Mrs. Macleod. The Delafields, the Van Rensselears, the Livingstones, etc., were all among its patrons. It was scarcely possible for the pupils of the school to meet a stranger, and even on receptions they were not allowed to speak with them.

Captain Edward H. Schenley, of the English army, was then about forty-five years old and had been twice married. His first wife was a daughter of Lady Pool and after half a dozen meetings she eloped with him from a ball given by the Queen's Guards, of which he was then an ensign. After her death he met Miss Inglis, a cousin of the late Earl of Fife and a cousin once removed of Lord Erskine. While traveling in Europe with friends, she, too, consented to an elopement. She had a sister who was married into a noble family of Spain, while another sister was the accomplished Mrs. Macleod who conducted the Staten Island school. On the death of his second wife Captain Schenley came to America and when taken ill was invited to the Staten Island school home by his sister-in-law that she might care for him and bring him back to health. He was a fine looking man whose forty-five years sat lightly on him, and though not of noble birth he was a landed gentleman of England, who was closely related to nobility and his family name figures in Burke's Peerage. Mrs. Macleod thought that his being twice a widower and his years insured a sufficient safe-guard, and her first suspicion was the elopement of Miss Croghan with the handsome captain. The gold lace and bright buttons had captivated the entire school, for one of the girls admitted afterwards that any of them would have gone with him had he asked them to do so. The girl was barely sixteen years old, and this with her wealth added to the notoriety of the affair, and, it is said, actually broke up the school, for timid parents feared that other English guardsmen might be lurking around to snap up a handsome fortune. They were married in 1842.

The Schenleys took up their residence in England and the union proved to be a very happy one. Queen Victoria, however, waited many years before she would allow Mrs. Schenley to be presented at court, because she had been a "disobedient daughter." The greater number of her years after her marriage

were spent in London, where she became a leader in the most exclusive society of England. Until her father's death on September 24, 1850, a part of the time was spent in Pittsburg in the quaint old mansion, "Picnic," on Stanton avenue. The beautiful structure has not been changed since, as a girl, she made it her home, and Time's hour-glass seems to have been turned backward a half a century or more, for every room of the mansion is as she left it.

Captain Schenley had many noble traits of character. He thoroughly imbued his wife with the old English idea of holding the ownership of real estate and in this way the possessions inherited by her from her mother have remained almost entirely in the one name all these years, and are now known as the Schenley Estate. Mrs. Schenley proved to be a most loyal friend of Pittsburg, and well indeed has the city perpetuated her name. Her many donations have been mentioned in their proper places elsewhere. Chief among her gifts were the Schenley Park and the Old Block House. Captain Schenley died many years ago, and Mrs. Schenley died on November 4, 1903.

We have many times in these pages referred to Ebenezer Denny who was very prominent in the early years of the city. He was born in Cumberland county on the 11th of March, 1761, and was the oldest son of William and Agnes (Parker) Denny. When thirteen years of age he was appointed to carry dispatches across the Allegheny mountains to Fort Pitt. On these journeys he traveled alone and slept out many nights in the woods. He made regular trips of this kind and sometimes narrowly escaped death at the hands of the Indians, and it is said was often in terror from wild beasts. He was an ensign in the First Pennsylvania Regiment in the Revolution, and participated in many of the campaigns and battles of that great war. Towards the close of the Revolution he accompanied General Arthur St. Clair to the South where he was engaged in several battles in the Carolinas. After the Revolution he was for several years engaged in the Indian warfare and was adjutant general and aid-de-camp to both Generals Harmar and St. Clair in the battles in their expeditions against the Indians in 1790 and 1791. He was appointed by General St. Clair in November, 1791, to carry the news of the defeat of the American army at the Battle of the Wabash to General Washington. He conceived a high regard for both Generals Harmar and St. Clair and afterwards named two of his sons after them respectively. Harmar Denny became a noted man in Pittsburg and is spoken of elsewhere in these pages. After the close of the Revolution and after the Indians had somewhat subsided, Ebenezer Denny settled permanently in Pittsburg and was married to Nancy Wilkins, a daughter of Captain John Wilkins and a sister of William Wilkins who is referred to elsewhere in these pages. He was afterwards a county commissioner and was then elected treasurer of Allegheny County. In 1816 he became the first mayor of the newly incorporated city of Pittsburg.

His memoirs are published and are very valuable. They are known as Denny's Military Journal and were published by Lippincott & Company in 1859.

A noted man of Pittsburg in the forties of last century was General William Larimer, Jr., who was born October 24, 1809. He was married to Rachel McMasters, of Turtle Creek, on October 16, 1834. The first business he engaged in was the wagon business, a line of which he, in company with John Irwin, owned and operated between Pittsburg and Philadelphia as early as 1830. After this he was engaged in merchandising and in many other newer enterprises which sprung up in the city in the thirties and forties. His success generally prompted his selection as first president of the Pittsburg & Connellsville railroad and treasurer of the Ohio & Pennsylvania, now the Pittsburg, Fort Wayne & Chicago railroad. He was also the chief proprietor in the Youghiogheny Slack Water System and of the Remington Coal railroad at McKee's Rocks. Otherwise he was interested in the Overland Transportation Company and in the gold mining in the West. When the Pennsylvania railroad was completed he united with John Covode and Thomas A. Scott in the formation of the Westmoreland Coal Company, which still exists as one of the largest in Pennsylvania.

He helped to form the Liberal party and supported James G Birney for President in 1844. After that until the defeat of Scott in 1852, he was in the front rank in the Whig party in both state and national politics. He was made major-general of the state militia in 1852, and was prominently spoken of as a candidate for governor of Pennsylvania.

The financial troubles which came in 1854-55 bore him down, and deciding to start anew in the West, he left Pittsburg for Nebraska in 1855. The Republican party of that territory was organized at his home in Omaha and he was almost at once elected to its legislature. He also became interested in Kansas in 1858 and later in Colorado. He helped to found the city of Denver, and built its first house on land which he and his son had pre-empted. There he was appointed United States commissioner and judge of the probate court of the First Judicial District of the Territory. For more than twenty years he was thus prominently identified with the public interests of Nebraska, Kansas and Colorado.

When the Civil war began General Larimer raised the Third Regiment of Colorado Volunteers and entered the service as its colonel. Increasing difficulties in the West, and particularly in Kansas, prompted him to resign and return there where he was engaged in home defense as captain of General Blunt's bodyguard—four companies.

He was gifted with personal magnetism which gave him great strength in public speaking. He was a man of fine appearance with a martial bearing, due in part to his long military training. A close reader, he had at his command a great fund of general information and spoke entirely without notes. The *Rocky Mountain News* of September 11, 1862, publishes a war speech and we quote the editorial in part, and but two paragraphs of the address:

"The war meeting held here Saturday night, last, was the largest and most enthusiastic ever held in the territory. The meeting was scarcely organized before General Larimer was called for by the immense crowd in attendance. He came forward and was received with hearty cheers and most kindly feelings. The General spoke as follows:

"'Mr. Chairman and fellow citizens: I am an old pioneer. I came to this country in the fall of 1858. I am one of the first settlers of the Rock Mountain Territory. I wrote one of the first letters ever written from this country, certainly the first ever written from Denver City. I had dated my latter the night before, "Golden City," but after writing it we met and changed the name to Denver, after our governor, an honor to his country and to his name. Well, Denver is there still, and I believe will be for ages to come.

"Abraham Lincoln has been trying to preserve the Constitution and the Union, sustaining every State in all its rights, whether real or fancied, and to leave slavery untouched wherever it existed, believing that the National government was not responsible for it. He has been moving slowly, and has done everything that could be done to conciliate and assure the South that their institution would be untouched. In this course I have been disposed to stand by the President. Now I begin to think that I can see the hand of God in this matter. Had this war been ended a year ago, slavery would have remained untouched. The millions who have so long been bowed down by tyrrany and oppression would never have scented the air of freedom and universal liberty as it passed on every breeze over the plantations of the South from every far-off blood-stained battlefield, but now they have breathed its breath, heard its words, drunk in its spirit, and "as the lightning cometh out of the East and shineth into the West," so has the light of universal freedom flashed tongue to tongue and mind to mind over all the land.'"

After the war closed he was elected to the Kansas State Senate and served in that capacity from 1867 till 1870.

While living in Pittsburg he enjoyed a wide personal acquaintance with prominent bankers, journalists and statesmen of Philadelphia, New York, etc., and many of them were entertained at his home on Penn avenue. The great editor and philisopher, Horace Greeley, was a frequent guest, but looked more like a farmer than a noted man of letters. One morning when Mr. Greeley and General Larimer were walking down Penn avenue, a neighbor seeing them, stepped back into his house, "to spare the General from the embarrassment of introducing his country cousin," as he afterwards said, and thus to his sorrow missed meeting the great journalist. Later Mr. Greely visited him in Denver, and the General supported him for the Presidency in 1872, and it is claimed that he was the first man to suggest Mr. Greeley for nomination. Another friend who often visited the Larimer home in Pittsburg was General Samuel Houston. True to his Huguenot ancestry, he gave to all who came the best he had.

His name was given to Larimer avenue, Pittsburg; Larimer Station on the Pennsylvania railroad; Larimer township in Somerset county; Larimer county in Colorado; Larimer street in Denver, and to Fort Larimer in Arkansas.

General Larimer died near Leavenworth City in Kansas, on May 16, 1875, and his wife died in Pittsburg on September 16, 1879.

One of the great men in the building up of Pittsburg was Thomas M. Howe, who was born at Williamstown, Vermont in 1808. After a reasonably good education which he received in the Warren Academy in Ohio, he entered the dry goods department of Mason & McDonough in Pittsburg, and was afterwards employed by S. Baird & Company in the same business. At that time the canal to Pittsburg was completed and the city was experiencing its first great business expansion. The young man then entered a partnership with Leavitt & Company, the firm after that being known as Wallace, Howe & Company, hardware dealers, and arose very rapidly in business life. In 1839 he became cashier of the Exchange Bank and tided the institution successfully through the panic, displaying a marked business ability in that line.

Mr. Howe from his youth had been a Whig and an advocate of the American system which has been spoken of many times in previous pages. This led him somewhat into politics, and he became a firm supporter of President Harrison in the campaign of 1840. In 1850 he was elected to Congress and re-elected in 1852. When the Republican party was born in 1860 he became its staunch supporter and was a presidential elector, voting for Lincoln and Hamlin. He was frequently spoken of as a candidate for governor of Pennsylvania and was before the Republican state convention for the nomination in 1860, but was defeated by Andrew G. Curtin. The governor, however, appointed him Assistant Adjutant-General on his staff. After that he was urged to accept the nomination for state treasurer and for United States treasurer, but we believe never gave his consent and in reality withdrew his name from the contest.

He had been married in 1833 to Mary A. Palmer of Philadelphia. Other branches of business in Pittsburg had received his closest attention and it would be difficult to enumerate the lines of manufacturing with which he was identified. He was engaged in the manufacture of steel with Hussey, Wells & Company, afterwards Hussey, Howe & Company, and still later Howe, Brown & Company. He was a leading spirit in building the Cleveland & Pittsburg railroad. During most of his life he took a leading interest in church work, being a member of Trinity Protestant Episcopal Church. He died on July 20, 1877, and long, long will he be kindly remembered by all who knew him or who had business associations with him.

General James K. Moorhead, of Pittsburg, was born in Halifax, Dauphin county, in 1806, of parents who had come from the North of Ireland, settling in Lancaster county in 1798 and who later removed to the vicinity of Harrisburg. The early death of his father threw rather an extensive business into his hands, and his opportunities for obtaining a liberal education in his youth were limited. In early life he became a tanner's apprentice in Lancaster county, and after learning the business he and his brother-in-law built a tannery at Montgomery's Ferry. The canal business was the all consuming one in that day and Mr. Moorhead very soon planned a line of light packet

boats for the exclusive use of passengers on the canal. This line was known as the Pioneer Packet Line and plied between Pittsburg and Philadelphia. In this way he came to Pittsburg in 1836 and rapidly became identified with many of its business interests. He took a leading part in the Monongahela river navigation enterprise and displayed great energy in forcing it to a completion. He became president of the Navigation Company in 1846, and retained the presidency, or at all events was a leader in the company for more than forty years.

He was appointed to a position under the Adjutant General in 1838. After filling it a short time he resigned, but this gave him the title of "General," which, not having earned on the battle field, he sought to be relieved of, but nevertheless he was known by that title for the rest of his days. He was a bridge builder and constructed locks, dams, reservoirs, etc., and also assisted in the establishment of the cotton industry in the early forties. When the telegraph became successful he was made president of the Atlantic Telegraph Company and of the Pittsburg, Cincinnati & Louisville Telegraph Company, both of which lines he helped to build and which finally became a very important part of the Western Union Telegraph Company.

In early life Mr. Moorhead was a Democrat, but he became a Republican in 1858 and was nominated and elected to Congress for three successive terms. He declined a fourth nomination, but was nevertheless sent back for the fourth and fifth term, after which he declined in so emphatic a manner that he was not renominated. He was therefore in Congress during the Civil war and during the reconstruction period which followed. He was chairman of several committees and stood very close to President Lincoln and to Mr. Stanton, the latter of whom he knew well before entering Congress. He had been postmaster of Pittsburg during Van Buren's administration, and was chairman of the Republican County Committee during the Garfield campaign in 1880, and presided over a Republican mass meeting in the campaign of 1882. It will thus be seen that he gave more than forty years of his life, in part at least, to the politics of the state and nation. He was married on December 17, 1829, to Jane Logan, of Lancaster county. They lived to celebrate their golden wedding on December 17, 1879.

Charles Lockhart was born in Scotland in 1818 and came with his parents to America in 1836, coming directly to Pittsburg, but afterwards they settled on a farm in Trumbull county, Ohio, where they remained but a short time and returned to Pittsburg. He was in partnership in business with James McCully, the firm name being McCully & Company, the firm also including the late William Frew who was a nephew of Mr. McCully's. This partnership beginning in 1855 continued until 1865. Mr. Lockhart became prominent as a producer of oil in the early years of his life while engaged in the mercantile business with McCully. He purchased a few barrels of oil in 1852 which he disposed of to advantage, and this led him to conceive the idea that there was a great future in the business. Associated with him in the

oil business was A. V. Kipp. When oil was discovered on Oil Creek by Colonel Drake in 1859, Mr. Lockhart investigated the matter and organized a company under the name of Phillips, Frew & Company of which he was a member. They bought a lease and began active operations on the Downing farm in the spring of 1860. In March of that year they struck a well with a good flow and fifty-four barrels of it were shipped to Pittsburg on the steamboat "Venango," and this was the first oil in any quantity to reach the market. Shortly after this Mr. Lockhart, with samples of the oil which he had refined, went to Europe and really brought the attention of the business people of Europe to its value for it was then an unknown product. He was engaged with Mr. Frew in building oil refineries in 1860 and 1861. They established a commission house in Philadelphia, and a new firm, Warden, Frew & Company, built the Atlantic Refinery in that city. When the Standard Oil Company was organized in 1874 the refineries which had been projected by Mr. Lockhart were taken over by that corporation and Mr. Lockhart was thereafter connected with the Standard Oil Trust. He was also interested in the manufacture of iron and glass, in timber lands in the South, in gold and silver mining in Colorado and in other western states and in farming in Minnesota. He was furthermore a director in the Pittsburg National Bank of Commerce and was engaged in various pursuits.

He led a busy life, but gave great attention to the fine arts, and at his death had a large collection of paintings which ranked among the first in Pittsburg, containing the works of many of the most celebrated artists. He was a member of the United Presbyterian church most of his life, and gave to it with a liberal hand.

Felix R. Brunot was born February 7, 1820, in Newport, Kentucky, where his father, a regular army officer, was located. Elsewhere we have referred to his grandfather, Felix R. Brunot, a physician of early Pittsburg. In 1821, the family returned to Pittsburg. The father retired from the army shortly after that, and brought up his family in a residence standing where the Union Station now stands. Felix R. Brunot was sent to Jefferson College in 1834, and after a thorough course he became a civil engineer and was steadily engaged in that work for some years. In 1842 he engaged in the mercantile business in Rock Island, Illinois. Succeeding well financially he returned to Pittsburg in 1847, and engaged in the manufacture of steel. He is however remembered mostly as a philanthropist and because of the deep interest which he manifested all his life in moral reforms. During the Civil war he became known in this field and some reference has been made to his work in other chapters. Secretary Stanton finally gave him a pass which permitted him to go through the lines at all places to take charge of hospital work. At Savage Station he had charge of twenty-five surgeons, cadets and others and had many wounded soldiers to look after. When the order came to retreat he was unable to move the wounded and was unwilling to abandon them. The result was that he and his party

were all captured by the Confederate army. They were given employment in looking after the suffering enemy which was, of course, most willingly done. In about a week their services were no longer needed and all were sent to Libby prison. The authorities at Richmond then sent Mr. Brunot to Washington to negotiate an exchange for himself and two others for two prominent Confederate soldiers who were in northern prisons. Stanton was a personal friend of Brunot but would not permit the exchange to be made. He made it clear, however, that Brunot need not return to prison, for under the rules of war, he had been from the first unlawfully detained. But Brunot had given his word to the Confederate authorities that he would return and this he kept faithfully by going back at once. Shortly afterwards he was exchanged regularly and for the remainder of the war he was continuously engaged in behalf of the needy soldiers of the northern army. In 1869 President Grant placed him at the head of the Board of Indian Commissioners, where he performed a great work for the red men and was able to arouse a public feeling in their favor, which has scarcely been diminished even to this day. He spent the greater part of five years among their tribes in Wyoming, Colorado, California, Washington, Oregon and Montana, and became a recognized authority throughout the nation on all matters pertaining to them. He took the side of the Indian and labored earnestly for his cause, not only among them but in the public press and on the platform throughout the East. During all these years of philanthropic work he was also deeply interested in Pittsburg in a business way and in church work, being a member of St. Andrew's Protestant Episcopal Church. He died———.

We have referred many times to Cristopher L. Magee and his benefactions to the City of Pittsburg. This is too soon after his death to write of the effects of his life on the city, but a few words concerning him may not be out of place. He came from a family that has been prominent in Western Pennsylvania for many years as the reader has seen in these pages. He was born on April 14, 1848. The death of his father in 1863 made him practically the head of his family and threw him upon his own resources. He became a clerk in the office of the city controller and in that way entered the political field to which he gave a great part of his life. There was nothing which he enjoyed more at any period of his life than a contest for supremacy in an election. In 1869 he was made cashier of the city treasury and in 1871, when only twenty-three years old, was elected to the office of city treasurer by eleven hundred majority whilst the candidate for mayor on the same ticket was defeated by over fifteen hundred. This gave him great popularity in the city and possibly opened the eyes of the people to the strength of the young man. In 1874 he was elected to the same office, again running ahead of his ticket. He very soon became the leader of the Republican party in Pittsburg. He served the party in many capacities as a member of the State Committee, of state conventions and of the Republican national conventions. He was

a member of the Chicago convention in 1880, and under the leadership of Roscoe Conkling, was one of the three hundred and six who voted continuously for General Grant for a third term of the presidency. He was again prominent in the national Republican convention of 1884, where he advocated the nomination of Chester A. Arthur. In 1888 he was a leader in the national convention and succeeded in creating a break in the Pennsylvania delegation from Sherman to Harrison which indirectly brought about the nomination of the latter. In 1896 he was nominated State Senator and was elected without any one being put up to oppose him. He was re-elected in 1900.

During these years he had become extensively engaged in business and succeeded beyond all expectations in building street railways and in effecting a union of many lines into the Consolidated Traction Company of which he was president. In 1884 he bought the *Times,* a daily newspaper which until he took hold of it, was one of the weakest journals of the city. He built it up and made it one of the strongest, best published and brightest papers in Western Pennsylvania.

He was a man of magnificent personal appearance. Indeed many have written and spoken of him as the finest looking man they ever saw. Mr. Magee was a lover of art and books, though he had, as we have said, but a limited preliminary education. He lived a perfectly temperate life, never tasting anything under any circumstances that intoxicated. This was most remarkable in one, who engaged in politics as he was, was thrown continuously among men of convivial habits. In all his political life, we believe, he was never charged with making a promise which he did not keep, unless unforeseen circumstances prevented its fulfillment. Unfortunately he did not live to round out the full measure of life that his strength and vitality promised him. In 1901 he became afflicted with a deadly malady which carried him off in March of that year. There will soon be erected to his memory in Pittsburg a bronze statue, by the great sculptor, Augustus St. Gaudens, and it is, by the way, one of the last works of his life, he having finished it but a few days before his death. Mr. Magee's memory in Pittsburg will not be preserved alone by this monument. In his will he devised almost his entire estate to the founding of the Elizabeth Steel-Magee Hospital, named in tender memory of his mother, which will one day be constructed, and will be, we are told, one of the most complete and thoroughly equipped hospitals in the world.

Scattered through this entire work the reader will find many other short sketches of the real Makers of Pittsburg. Many of them are to be found in the chapter devoted to the Bench and Bar, the Medical Profession, the Revolution, the University, etc. Were it not for this, we would regard the above chapter as a very incomplete list of the truly great men of the city. The reader must therefore consider the above brief sketches in connection with similar ones throughout the entire work.

The following is a list of the mayors of Pittsburg:

Ebenezer Denny, July 9, 1816 to July 23, 1817.
John Darragh, 1817 to 1825.
John M. Snowden, 1825 to 1827.
Mangus M. Murray, 1828.
Matthew B. Lowry, 1830.
Mangus M. Murray, 1831.
Samuel Pettigrew, 1832.
Jonas R. McClintock, 1836.
William Little, 1839.
William W. Irwin, 1840.
James Thompson, 1841.
Alexander Hays, 1842.
William J. Howard, 1845.
William Kerr, 1846.
Gabriel Adams, 1847.
John Herron, 1849.
Joseph Barker, 1850.
John B. Guthrie, 1851.
Robert M. Riddle, 1853.
Ferdenand E. Volz, 1854.
William Bingham, 1856.
Henry A. Weaver, 1857.
George Wilson, 1860.
B. C. Sawyer, 1862.
James Lowry, 1864.
W. C. McCarthy, 1866.
James Blackmore, 1868.
Jared M. Bush, 1869.
James Blackmore, 1872.
William McCarthy, 1875.
Robert Liddell, 1878.
Robert W. Lyon, 1881.
Andrew Fulton, 1884.
William McCallin, 1887.
Henry Z. Gourley, 1890.
B. McKenna, 1893.
H. P. Ford, 1896.
William J. Diehl, ——.

RECORDER UNDER NEW CHARTER.

A. M. Brown, 1901.
J. Q. Brown, 1902.

By Act of April 23, 1903, title of chief officer changed to Mayor.

W. B. Hays, 1903.
Geo. W. Guthrie, 1906.

MAYORS OF ALLEGHENY.

William Robinson, Jr., 1840.
Thomas Semple, 1841.
William B. Foster, 1842.
Hesekiah Nixon, 1844.
R. S. Cassatt, 1846.
Henry Campbell, 1847.
Jonathan Rush, 1849.
H. S. Fleming, 1850.
W. R. Park, 1853.
William Adams, 1854.
Jeremiah Dehaven, 1857.
John Stuckrath, 1858.
John Morrison, 1859.
Simon Drum, 1861.
A. C. Alexander, 1863.
John Morrison, 1865.
Simon Drum, 1868.
Alexander P. Callow, 1870.
David Neillie (33 days), 1874.
H. S. Fleming, 1874.
Ormsby Phillips, 1875.
Thomas Megraw, 1878.
Lewis Peterson, Jr., 1881.
James G. Wyman, 1884.
Richard T. Pearson, 1887.
James G. Wyman, 1889.
William M. Kennedy, 1891.
James G. Wyman and Nicholas Voegtley, each one month.
Charles Gever, 1897-90.
James G. Wyman and John R. Murphy, half term each, 1900-1903.
James G. Wyman, 1903-06.
Charles F. Kirchler, 1906.

In 1834 the law was so changed that thereafter the mayor was elected by the people. Prior to that he was selected each year by the councils and they were compelled to select one of the aldermen of the city.

In January, 1858, the term was increased to two years and by Act of April 1, 1868 it was increased to three years.

Not unmindful of General Washington, and his connection with the early history of this locality, an equestrian statute adorns the North Commons in Allegheny. This was erected by the Junior Order of United American Mechanics of Western Pennsylvania and dedicated February 22, 1891. It is a striking figure of General Washington upon a steed, possessed of a spirited look. Washington is represented as holding his large Revolutionary, military hat which rests upon the saddle skirt, while his sword is dangling at the other side.

On the opposite side of the park stands the memorial pile erected to the memory of Alexander Humboldt. This is a large, well designed, sandstone base and pedestal surmounted by a bronze bust of the baron. A large circular urn surrounds the whole and in summertime, rare and beautiful flowers are planted within. This monument was erected by the Germans and dedicated in 1869, General U. S. Grant being present upon the occasion. It was during the first year of his presidency.

What has been termed the living monument of this park, is situated between the Washington and Humboldt monuments, and consists of a European linden tree, which is now a foot in diameter at the ground. This was planted by President Grant, December 14, 1879 and is enclosed within a pretty iron fence surrounding a plot about twelve feet square.

On the east side of the park, near the lagoon, is a granite statute of the noted labor advocate and editor Thomas A. Armstrong. This was erected by the laboring men of the United States. Among its inscriptions are these words: "Advocate of the Rights of Labor," "Equality and Justice to All." "Brave Soldier and Upright Man." The shaft is twelve feet high by three feet in diameter placed upon a triple-base of granite. The life-size statute surmounts the whole. The mounment represents him as dressed in a business suit and holding a newspaper in his right hand, while he is looking off as though in the act of addressing an audience. This monument cost $10,000.

Greater Pittsburg's first Industrial Exposition was organized in 1875 by a stock company which had its buildings on South avenue, between School street and the Union bridge approach in Allegheny. After two years exhibit it failed and was succeeded by a second association which continued until fire destroyed the buildings on October 2, 1883. On October 30, 1885, the Western Pennsylvania Exposition Society was chartered and erected extensive buildings on Duquesne Way, near the confluence of the Allegheny and Mononghela rivers. Its first annual exhibition continued from September 4, to October 19, 1889, at which there was a total attendance of 561,000 people. This company numbers among its stockholders many of the best business men in Pittsburg and Western Pennsylvania, and has grown in importance with with the passing years and is still operating with immense exhibitions of products of almost an endless variety, coming even from the remotest states in the Union. As early as 1878, at the holding of the first company's exhibition, there were more than 155,000 admission tickets sold, while the daily average

attendance was 5,366. During that season, President Rutherford B. Hayes was present, and given a genuine ovation by the city. The net proceeds of the exhibition for one day, were donated to the yellow fever sufferers of the South, the same amounting to $2,710.

The Pittsburg Exposition has become a permanent fixture in the city, and is looked forward to by tens of thousands annually, who enjoy and profit by the month or two of exhibition held each autumn. At the last annual exhibition (1907) there were more than four thousand people ready to gain an entrance to the buildings at opening hour.

CHAPTER XXXIV.

The Press of Pittsburg.

The leading daily newspapers of Pittsburg are the *Gazette-Times,* the *Dispatch* and the *Post,* published as morning papers, and the *Chronicle-Telegraph, Press, Leader* and *Sun* as evening papers. In the last quarter of a century the newspapers of Pittsburg have earned a high standing both at home and abroad. So chaste are they in their columns as a rule and so neat in their mechanical make-up, that we almost regret that it is not within the province of these pages to refer particularly to them as they exist now rather than to the early newspapers and news gatherers of Pittsburg. The reader has frequently seen reference to the *Gazette,* the *Mercury,* the *Mirror,* the *Manufacturer* and to many others in this work. The *Gazette,* now known as the *Gazette-Times,* is the oldest of all newspapers in Western Pennsylvania. It was founded by John Scull and its first issue appeared on July 26, 1786. It was then called the *Pittsburg Gazette.* Scull had a partner named Joseph Hall, who was a printer only, and who died shortly after the paper was founded, leaving Scull alone to perform the duties of editor, reporter, type-setter, and in addition he was compelled to deliver his paper through the town. All of the type, the printing press and fixtures had been brought from Philadelphia across the Allegheny mountains on pack horses, and the paper used by him had also been transported in the same way from the East. Frequently during the wet weather or bad roads the pack horse trains failed to arrive, or perhaps came without the usual supply of paper, as is indicated in one instance at least. In either of these events the ingenious editor borrowed cartridge paper from the commander of Fort Pitt and upon these printed several of his editions. The best paper procurable in those days was of an inferior grade compared with that upon which our modern papers are printed, and the cartridge paper was of a much more inferior grade. Though the *Gazette* had the whole of Western Pennsylvania to itself, its circulation was so limited that it survived only through the great care and skill of its editor in making both ends meet. Nearly all the region between Pittsburg and Bedford was an unbroken wilderness, whilst the country to the north and west of Pittsburg was in a still more primitive state. Even a weekly mail was not established for nearly twenty

years after the *Gazette* was founded. The paper in the meantime was delivered by special messengers who chanced to be passing the cabin of the subscriber on other business, and the editor himself delivered his paper to the subscribers in Pittsburg. The editor could not depend on advertisements to make his paper pay, for there are but few in its early colums. Most of the court advertising in that day was done by written hand bills. Occasionally in the old files, one notices an advertisement concerning the running off of an apprentice or of a slave. Now and then the advertisement of a "vendue" appears in the early editions, and these with perhaps the notice of a lost horse or cow, constituted the greater part of the advertising material. The office of Sheriff was then almost the only elective one, and the friends of the respective candidates frequently announced their names in the columns of the *Gazette*. Occasionally a Pittsburg merchant, or storekeeper as he was called then, advertised his wares and his willingness to exchange them for country produce such as wool, peltry, yarns, socks, clothing, butter, eggs, whiskey, etc. There was but little editorial matter and still less local news in the *Gazette*, or indeed in any of the early newspapers. A leading feature of the paper was perhaps a contribution from some citizen who signed himself "Cicero," "Tacitus" or "Americus," who wrote generally in an extremely sophomoric vein on the subject of religion, public policy, politics, etc. The remainder of the issue was devoted to foreign news, mostly a month or two old when the paper was printed, but given most completely. There was scarcely a reference in those days to the local happenings of Pittsburg. In the Whisky Insurrection which occupied the attention of the whole nation, the *Gazette* said nothing on either side, save that it printed an occasional notice sent in by the "Tom Tinker" men, usually accompanied with threats of violence to the editor if he failed to print it. But even these are scarce. The presence of the United States army in Pittsburg was considered as a matter of common information among the subscribers or readers of the *Gazette*, and why should the editor burden his columns with an account of what all already knew? Local news could readily in so small a town be handed around from one person to another, and why, therefore, should it be published in the newspaper? This peculiar feature of the old papers was kept up until the city grew so large that the local news could not be passed around from neighbor to neighbor. Even as late as the forties, the best papers in Pittsburg contained but little of the doings of the city. The change between the old papers and those of a modern date in this respect is indeed a marvelous one.

Mr. Scull continued as editor and proprietor of the paper for thirty-two years in all, when he sold his interest and moved to Westmoreland County, where he died an honored citizen in 1828. He was succeeded on the *Gazette* by Morgan Neville, who afterwards transferred it to Neville B. Craig, who was one of its ablest editors. Mr. Craig was also practically the oldest and most oft quoted historian of Pittsburg. He was a son of Major Isaac Craig and Mary Neville Craig. Isaac Craig will be remembered as having command of

Fort Pitt after the Revolution. Neville B. Craig was also a grandson of General John Neville who came here from Virginia to take command of Fort Pitt during Dunmore's war and afterward figured so extensively in Western Pennsylvania history. Neville B. Craig was born most likely in the old block house, on March 29th, 1787 and was educated at Princeton College. Afterwards he read law and was admitted to the Allegheny county bar on August 13, 1810. He was also a member of the legislature of Pennsylvania. He took charge of the *Gazette* in 1829 and owned and edited it until 1841, during which time he published the first daily paper, the *Gazette,* in Pittsburg, or indeed anywhere west of Philadelphia. To him more than any other, we are indebted for the early history of Pittsburg. His writings were all of a high character and are generally accredited with the greatest degree of credence. They are "The Olden Time," two volumes published in pamphlet form and afterward collected and published in 1846 and 1847; "A History of Pittsburg" in two volumes, published in 1851; "Life and Services of Major Isaac Craig," etc., published in 1854; "A History of the Whisky Insurrection," published in 1859, and "An Index of the Bible." He lived at Oakland near Pittsburg and died there March 3, 1863 and was buried in the Allegheny cemetery. He was succeeded as owner and editor of the *Gazette* by David N. White, who in turn sold it to Samuel Riddle and Company, in 1856. It is now past 120 years old, and by recently adding to its ownership the Pittsburg *Times,* its name now being the *Gazette-Times,* has probably the largest circulation in Western Pennsylvania. When first founded it was a Federalist paper and continued so under the long editorship of Scull. It was a Whig paper under Craig and White, and since 1856 it has been a Republican paper.

The Pittsburg *Post* traces its origin back to the year 1804, when Ephraim Pentland, a progressive pioneer, undertook the publication of the *Commonwealth.* He was followed seven years later by James C. Gilleland, with the *Mercury,* which shortly afterward absorbed the *Commonwealth.* The Allegheny *Democrat* was launched before the public in 1824, with John McFarland at its head. Seven years after William B. McConway established the *American Manufacturer.*

In 1840 the office of the *American Manufacturer,* Thomas Phillips proprietor, was removed from Liberty avenue, opposite Barker's alley, to a new building, at the corner of Wood street and Fifth avenue, where the First National Bank now is. About a year later the *Mercury and Allegheny Democrat,* William H. Smith proprietor, was removed from the corner of Market street and Fourth avenue, to the corner of Fifth avenue and Wood street, opposite the *Manufacturer's* new office. Late in the summer of 1842 the plant of the *Mercury and Democrat* was removed to that of the *Manufacturer,* and on September 10, 1842, the first issue of the *Daily Post* appeared under the ownership of William H. Smith and Thomas Phillips. At this time Pittsburg had a population of about 22,000 and Allegheny, 10,000.

Phillips & Smith published the *Post* until after the big fire, in 1845, when they sold out to Bigler, Sargent & Bigler. In 1851 Lecky Harper and Thomas Phillips (who had returned from St. Louis) bought the *Post.* Mr. Phillips soon sold his interest to Mr. Harper. The *Post* was sold to Gilmore and Montgomery, who disposed of it later to James P. Barr.

In 1847 the telegraph was finished and the *Post* printed a column of dispatches each day, under the head of "Received by lighting and printed by steam." By this time the old fashioned hand-press had been laid aside for those operated by a greater power.

James P. Barr became editor of the paper on May 1, 1857. In 1866 he took into partnership Edwin A. Myers, a former partner of the job business.

The *Post* remained in the building which first sheltered it, at Fifth avenue and Wood street, until 1870, when it removed to Wood street and Virgin alley, as more room was needed. For 16 years this building was occupied and then, in 1886, the plant was temporarily taken to the building across the street and a new building erected on the site of the old one.

In 1886 the *Post* was incorporated as the Post Printing and Publishing Company, with James P. Barr at its head. After his death he was succeeded by his son, Albert J. Barr. The old "blanket page" was done away with and the company began printing a brand new up-to-date paper.

Upon the succession of Col. Barr to the proprietorship, he assumed general editorial control which he retained for the remainder of his life—a period of thirty years, and was the head that shaped the paper's destiny. He associated with him in the editorial department at various times, different capable writers, to whom he always accorded due credit for the success of his paper. Among these writers, in turn were: Col. W. H. Whitney, who died in 1861; John C. Dunn, long since deceased; O. Darrott; A. W. Foster, deceased and Jones Mills, deceased, the last named becoming associate editor in 1877.

The year of 1892 is noted in the annals of the *Post* for two important events: The removal on June 1 to larger quarters on Fifth avenue, between Wood and Smithfield, and the beginning of the *Sunday Post,* on September 10.

The plant was visited by a great fire on February 14, 1897, St. Valentine's day, and for three months the paper was printed on the presses of its contemporaries. Its magnificent news service continued and the instances were numerous where all of Pennsylvania and sometimes the whole world was "scooped" by the enterprising Pittsburg journal.

Possibly the most notable beat ever secured in this city, or, for that matter, in any other city or country, was the great beat of the *Post* on May 1, 1898. At this time the *Post* printed the result of Dewey's wonderful battle in Manila bay, just 24 hours ahead of any other American newspaper.

Notwithstanding that the Fifth avenue office of the *Post* was well equipped and as large as any in the city, there was need for more room shortly after the opening of the new century. Negotiations were entered into and the

present building of the company, at Wood street and Liberty avenue, was purchased. The paper moved into its new home on February 20, 1904, where today it has one of the most complete newspaper offices in the country.

On March 1, 1906, the *Post* began the publication of an afternoon paper the *Sun,* whose success was instantaneous.

The present officers of the Post Publishing Company are: President, Albert J. Barr; secretary, Francis X. Barr; treasurer, Frederick M. Purdy.

Colonel James P. Barr, and long connected with the *Post,* was born in Greensburg, Westmoreland county, Pennsylvania, September 4, 1822. He came from that sturdy Irish stock that has ever made its impress on Western Pennsylvania history. His grandfather came to this country from Ireland in 1799 with his wife and four children—two sons and two daughters. Daniel H. Barr, one of these sons was Colonel Barr's father and was but about twelve years of age upon coming to America. The family at first resided in Georgetown, District of Columbia, but in 1818 moved to Greensburg, Pennsylvania. The father returned to Ireland but eventually came back and died at Blairsville, Pennsylvania, where he lies buried. He was a man of local prominence, active and aggressive in politics—an ardent follower of Jefferson and a champion of Jackson. While scarcely out of his teens he served in the War of 1812-14. He was a justice of the peace at Blairsville and postmaster under President Polk. Also was collector for Pennsylvania State Canal Company. By trade he was a cooper as was his father. He obtained a good education which he appreciated and used to the best advantage. He died suddenly at Blairsville, in 1852, aged sixty-two years.

James P. Barr of this notice, in 1841, hoping for better things than making barrels and cutting hoop-poles on Chestnut Ridge, came to Pittsburg and entered the office of the *American Manufacturer,* as an apprentice to learn the printer's trade. He helped stick the type which made up the forms for the first number of the first daily printed in Pittsburg and pulled the first copy of the same from an old fashioned hand-press. He advanced from one position to a higher until May 1, 1857, he was sole proprietor of the *Pittsburg Post.* A battle was on over the bonded indebtedness on account of city and county railroad bonds. His paper was the only one in Allegheny county which did not oppose repudiation of the bonds. He later championed Stephen A. Douglas in 1860, and in war days was true and loyal to the Union cause, but never believed in "Seward's sixty day picnic," knowing that a bitter strife was on. He was ambitious to publish a clean home and family journal which he accomplished. In time of the Civil war when the party to which he belonged were not always loyal he was handicapped at home and with many threats of destroying his plant, he saved it by leaving his case on the night of a supposed attack with the best element of Republicans of Pittsburg and informed them that unless they protected his rights as an American citizen that the city must take the consequences for he would not submit to loss without using force. This brought about a settlement and his office was ever after safe. He attended all

the Democratic conventions from 1852 on, and was delegate to the National Convention, where his influence had much to do with final nominations for a national choice. In 1863 he was elected surveyor general of Pennsylvania, and made a splendid record in office. He was but just and equitable in the celebrated oil land claims—his rule being "first come, first served," though often offered bribe money to give preference to some capitalist. His term expired in 1867. In 1875, he was named for governor but was after a hard fought convention defeated. When Judge Black resigned his seat as delegate in the Constitutional convention, October, 1873, Col. Barr was chosen delegate-at-large and was elected to succeed Black.

Col. Barr was of a kind disposition and ever sympathized with those who had unfortunately seen the rougher side of life, hence his printing office was an asylum for many who sought aid and counsel at his hands. It was Barr who should have the credit for originating the system of Soldiers' Orphan Homes so common in the Northern States, though others have been given such honor. He was first to start the move. He served a number of years as inspector of the Western Penitentiary and held other positions.

He married Anna Dunlevy, daughter of Jeremiah Dunlevy of Allegheny City and seven children were born to them all of whom survived the father. Mrs. Barr met death in a terrible railroad accident, October, 1865, and this cast a gloom over his future years. He was a devoted churchman and loyal to his convictions. After thirty years on the *Post,* he laid down life's burdens September 15, 1886, aged sixty-four years. He had that happy faculty of making and then retaining friends.

In one feature of its career the Pittsburg *Dispatch* is almost without a counterpart among the great dailies of America. It was profitable financially from the beginning, in February, 1846, although Pittsburg had by no means recovered from the business shock of the devastating fire of 1845; and, to make matters apparently more hopeless, a period of financial depression had begun which placed a fearful strain upon the monetary resources of the whole country. But J. Heron Foster, the projector of this early daily, was not to be dismayed by any material condition. He was a valiant opponent of the system of negro slavery, and the nation was then entering upon the "time which tried men's souls." He made a keen estimate of the anti--slavery sentiment of this region, and determined that it should have a newspaper exponent. The political and the business pulse beat in such enthusiastic harmony that the income of the new daily was continuously greater than the outgo, and the policy of aggressive, independent support of the best factors in civic life has ever since that humble beginning been responded to in the most generous manner in the moral and material support of the *Dispatch.* Yet it was in that same period that those notable newspapers the New York *Tribune* and New York *Herald,* with such men as Horace Greeley and James Gordon Bennett managing and editing, struggled for existence for a long time, often under a cloud of doubt whether they would not be forced out of existence on account of lack of support.

It is instructive, indeed, to the citizens of to-day to hark back to that time and compare the little four-page sheet with the immense issues of this modern day. Mr. Foster was practically his own writing force, as well as business manager and financier. Even with his genius, which made for progress in thought and action, always looking to the future, he could not have dreamed that the generation following would so revolutionize the art of newspaper production and make of the issue of a daily newspaper almost an act of magic. It may almost be said truthfully that in no other sphere of inventions has been seen anything so wonderful as the evolution from the hand press upon which the *Dispatch* was first printed, requiring hours for the production of a few hundred copies, and the colossal power presses which reel off completed papers at the rate of tens of thousands an hour.

Something more than a year after the beginning of the *Dispatch* A. W. Foster was taken into it as a partner. Later the firm became Foster & Fleeson. The paper had removed from one obscure office to another, always forging ahead in circulation and income. At the outbreak of the war J. Heron Foster joined the army with nearly all of his office force, the atmosphere by which he was surrounded being surcharged with patriotic fervor. No halt was observable, however, in the forward movement of the paper. It was eloquent in the cause of the Union. It was a factor in the organization and furtherance of the memorable Sanitary Fair, which produced thousands in money and immense bulk in supplies of various kinds for the relief of the sick and wounded soldiers; and in a myriad of ways it contributed to patriotic enthusiasm and activity.

Following the triumphant ending of the war two young men who had been for some time employes of the paper, Alexander W. Rook and Daniel O'Neill, became members of the firm, and the business ability of the one and the forceful writing of the other gave a new and marked impetus to the *Dispatch* in every department. It was a most fortuitous combination. Mr. O'Neill had been city editor of the paper for several years and no man was ever more keenly in touch with every movement of the municipal life of Pittsburg. As editorial writer he exhibited similar familiarity and sagacity in criticism of state and national affairs, and in the fervent days of reconstruction his treatment of national questions was recognized throughout the country as wise, forceful and influential. He gave the paper immense prestige as an independent critic, not to be swerved from its course by any partisan or factional consideration. He made, with the hearty sympathy of his associates, the *Dispatch* a pioneer in truly independent journalism, and every guiding mind since his death in 1877 has aimed not only to sustain this earlier reputation but to cultivate an even more virile independence and aggression as state politics gravitated into conditions which demanded more vigorous and sagacious action than ever before.

Under the management of this new firm of J. H. Foster & Co., the *Dispatch* flourished even beyond the most sanguine expectations of the proprie-

tors. From dingy quarters in Third avenue the even then comparatively small plant was removed to a five-storied building in Fifth avenue just below the old postoffice, the site of which is now occupied by the Park Building. The press with a horizontal bed which was the earliest form of what was called the "power press," and upon which the hand-set type was laid in a flat form, was soon exchanged for a rotary press upon the cylinder of which was placed the type locked in a curved "turtle." The paper was yet of the four-page, "blanket-sheet" style, except on extraordinary occasions when an extra sheet would be issued. Meantime, following the death of Daniel O'Neill the vacancy thus occasioned was filled by Eugene M. O'Neill, who had for years been conspicuous on the writing force of the paper. His was a mentality in all respects similar to that of his brother, and under his editorial direction the paper continued to increase in popularity and prestige, in response to the ever growing demand for a fearless and independent journal.

A fire which destroyed much of the building and practically all of the plant in the fall of 1877 was partially responsible for hastening certain improvements which had been discussed for some time by the firm of Rook & O'Neill. This was a project for discarding the "blanket-sheet" and the introduction of the "perfecting press," with a change of form to the smaller page and the more than doubling of the number of pages.

For a considerable time after the fire the *Dispatch* was issued from the press of one of the evening papers, and when the new press was installed in the remodeled building it was the acme of invention up to that date. The introduction of the smaller printed page from stereotype casts from matrices, thus remanding forever to oblivion the practice of printing direct from the type was another important pioneer step. At this time by far the majority of the city newspapers, like all the dailies of Pittsburg, were of the blanket variety, and the radical change made by the *Dispatch* was met with much wagging of the head expressive of doubt in regard to the success of the experiment. But the press which "cut, pasted and folded" was so wonderful in its operation, and convenience of the new size was so inviting to the reader, that the change was soon productive of immensely added popularity. Scores of boys who had hitherto been required for the laborious work of folding were dispensed with in that field, and went on the streets to sell, thus being transformed from mechanical automata into independent merchants rivaling each other and making profit according to their genius for the work.

With the introduction of the most modern form, the *Dispatch* once again became a pioneer, and it remained for some years the sole representative of the thoroughly up-to-date newspaper in Pittsburg in adopting all the most progressive ideas and the most perfect machinery of the period; and only a few newspapers in a very few other cities were at that time in the same category. But it was not only in the matter of mechanics and paging that the *Dispatch* made revolutionary strides in this period. Theretofore dependence had been placed almost wholly upon the Associated Press for its telegraphic news. This

in effect presented the same matter, word for word which appeared in other papers which were members of the Associated Press. The *Dispatch,* in the spirit of its newest forward movement, could not endure this dead-level of monotony. It had materially increased its editorial and reportorial forces, but it had made little change in the collation and presentation of the news of the world at large. This vulnerable spot was speedily recognized, and an expenditure for special correspondence from Washington, the national capital, and from the great centers of population, as well as from the smaller towns and cities within a great region of circulation, was initiated, which at times seemed just a bit alarming to the business office, for at that day telegraph tolls were high and the bills were onerous until it was realized that the circulation was responding to the better presentation of the news in the most delightful manner. This breaking away from the monotone of the press associations, admirable as these were in their place, was proved to be most fortunate. In the exciting Garfield campaign of 1880 the *Dispatch's* corps of special correspondents kept the public of the Pittsburg region informed as it never had been informed before in regard to the activities and possibilities. It will be remembered that Garfield was assailed with charges which seemed serious on the face of them, and many Republicans there were who felt that the result of the election was by no means certain.

In the year 1880 occurred the much-lamented death of Alexander W. Rook, the last member of that remarkable group which had conducted the *Dispatch* during an extended period under the firm names of J. H. Foster & Co., and the first firm of Rook & O'Neill. While Mr. Rook's death left a void in both the newspaper and in municipal activities, it is a matter of the history of great newspapers that the loss of an individual force halts no feature of the impetus which has given progress of the newspaper itself, but that it continues on its way to fulfill the full measure of its destiny. The entire management devolved upon Eugene M. O'Neill, after the death of Mr. Rook, and so continued for a period of about a dozen years, although for several years others who were engaged in the editorial and business departments were permitted to secure for a time small working interests.

Up to this time and later the *Dispatch* was published only on the six secular days of the week. At the time of the death of Mr. Rook a Sunday issue had been decided upon. That lamentable loss of a member of the old and later firms of Rook & O'Neill delayed for a time this progressive step which had not yet been contemplated by any other of the Pittsburg morning papers. It was not until 1885 that a Sunday issue was begun which at once gained a great circulation and has continued to gain steadily over a vast field, and with an immense advertising patronage.

Following the death of Mr. Rook, Eugene M. O'Neill, the remaining active partner, had, as has been stated, assumed general supervision of what had now become a far vaster and more profitable concern than ever before, and under his guidance the paper continued its progressive and absolutely independ-

ent career. In the Delamater-Pattison campaign in 1890 the paper consistently opposed the regular nominations as it had in 1881-2, and again Pattison was elected. O'Neill, during this decade of years, had become interested in other large investments and in 1902 relinquished his management of the *Dispatch,* and retired from active participation in its great activities. He was succeeded by Charles A. Rook, son of the late Alexander W. Rook, as President-Editor. Since taking this position Mr. Rook has with distinctive sagacity directed the business and editorial policy of the *Dispatch.* Under his direction the *Dispatch* has a far larger business, and larger independence of policy, if that be possible, than ever before; and the establishment has increased to proportions not anticipated even so short a time as a dozen years ago.

Ten years ago the Fifth avenue building had become entirely inadequate for the production of the paper. It was imperative that a building and offices especially designed for newspaper production should be acquired, and this want was met by the purchase of the property and the construction of what was considered to be an admirably adapted structure for the purpose. New and faster presses were installed, but the necessities of the *Dispatch* grew faster than could have been conceived, and the new plant, on the southeast corner of Smithfield and Diamond streets soon became too limited for the developing business. Recognizing that in Pittsburg "Eastward the star of empire takes its way," as there is no other direction in which empire can spread, and that Fifth avenue was the coming business street, and must perforce soon become a grand business thoroughfare for many reasons that are patent to any who think about the matter, Mr. Rook took time by the forelock and built where the sky scraper, forced to find space farther up town, will inevitably soon wall in the street and make of it one of the finest business avenues in the country.

Again some of the fogies shook a solemn, negative head, just as there were all sorts of doubtful predictions when the New York *Herald* removed from lower Broadway far a field to upper Broadway. Yet it is now a struggle of all the newspapers of New York, which had not spent so many millions on combined newspaper and office buildings in the old locality, that they could not relinquish their sites, to get land for buildings at any price in the up-town district, which within a few years has almost become a down-town district. So Mr. Rook looked with an eye to the future on the Fifth avenue site, and most far-sighted citizens already recognize the wisdom of his choice.

Here the President-Editor of the Dispatch Publishing Company has erected one of the most perfect of newspaper buildings, and installed one of the most perfectly appointed plants to be found in any city of the world. New and greater presses were installed, with the best of typesetting machines, stereotyping apparatus, facilities for speedy mailing and other distribution of papers.

A library of valuable reference work, but also containing many hundreds of volumes of fiction, poetry, the drama, biography, history, nature studies and miscellaneous works of a popular character, may be taken out by any and all of the employes, or may be read by the entire public at will in the pleasant

reading room, where, also, files of papers from other large cities are at hand.

A large auditorium on the third floor adjoining the library is for free use for lectures, concerts, other quiet entertainments and meetings of a varied character. The business office, occuping all of the first floor of the main building, is also a model for its purpose. Here each department of all features of business has its separate room, with ample space for healthful and comfortable work. In the building on the corner of Smithfield and Diamond streets the former business office is retained, and is principally devoted to the receiving of advertisements.

The one concession it has made to the downward trend in the price of newspapers was to reduce its price from three cents to two cents a few years ago, when nearly every other paper dropped to one cent, with such results that many of them are at this writing contemplating the adoption of the *Dispatch's* price. The two-cent price has never in any way militated against increase of circulation, but, on the other hand, has been of immense advantage in gaining a constantly increasing patronage for the simple and palpable reason that the better and perfectly reasonable price of two cents has given basis for more and more liberal expenditure for news. Besides, Pittsburg is in no sense a cheap city, or the vast region of the circulation of the *Dispatch* a cheap region.

Many other papers have been quoted from but the above are the survivors. The last century is strewn with newspaper wrecks and to account for them would require many pages of this work. The *Tree of Liberty* was founded in 1801, but survived only till 1807. The *Pioneer* was started in 1812 and the *Western Gleaner* in 1813; the *Western Journal* in 1826. None of them survived a decade. The *Allegheny Democrat,* founded in 1827, was purchased by the *Mercury* in 1841. The *Hesperus* came in 1828; the *Independent Republican* in 1829; the *Times* came in 1831 and expired in 1838. The *Advocate,* founded in 1832, was merged with the *Gazette* and may therefore be said to be surviving in that name. The *Western Emporium* was started in Allegheny in 1833, while the same year brought the *Saturday Evening Visitor* in Pittsburg. Neither of them survived the hard times of 1837. The *Christian Witness* came in 1836, the *Pittsburgher,* the *Daily American,* an evening paper, *Harris' Intelligencer,* the *Literary Examiner,* and *Sibbett's Western Review,* all came in 1839, perhaps with the expectation of better times. The *Literary Messenger,* the *Daily Sun* and the *Herald* and *Weekly Advertiser* appeared in 1841. The *Spirit of Liberty,* in 1842; the *Spirit of the Age,* in 1843; the *Mystery,* in 1844; the *Ariel,* the *Alleghenian* and the *Nautilus,* in 1845. The *Olden Time,* a paper rich in history, was founded in 1846. The *Stars and Stripes,* the *Albatross,* the *Temperance Banner,* and the *Evening Day Book* came in 1847. The *Token* was started in 1848, and the *Allegheny Daily Enterprise,* the *Dollar Ledger,* the *Evening Tribune,* the *Evening News* and the *Daily Express* all came in 1850. Many of these papers lived, some even less than a year, but all are gone and but

few of them survived as much as five years. Many of them were united with other papers, which also died shortly after.

The reader must not fail to consider the evening papers of Pittsburg when he comes to sum up the newspaper strength of the city. The *Pittsburg Chronicle* was founded in 1841 by R. G. Berford, and continued under the same name until 1884, when it was merged with the *Telegraph* and has since been known by the name *Chronicle-Telegraph*. The *Telegraph* had been founded in 1847, and seems to have maintained a rather fitful existence until the above union took place. The paper is now a strong one in every way.

The *Pittsburg Leader* was established in 1870 by Pittock, Nevin & Co., and has since maintained an independence which is indeed commendable. It has a large circulation and is a great force in the newspaper world. The *Press* was started in 1885 as the *Penny Press*. It has always been a sprightly and industrious collector of news, and though Republican in politics, it is prized as a news gatherer, rather than as a political organ. The *Sun* is the youngest of all prominent newspapers in Pittsburg, and is one of the strongest afternoon sheets. It was founded in 1906, its first edition being dated March 1. It is Democratic in politics, but like all of Pittsburg's papers, it may at any time be relied on as a news gatherer independent of politics.

But it is scarcely necessary to record even this much of the newspapers of the city, since no feature of its history is so well preserved as the history of its press. Its papers are found on file in all of the newspaper offices and in all the public libraries not only of Pittsburg, but of other cities of Pennsylvania, as well. Taken as a whole these files contain and preserve for all time a most complete history of the city.

The religious press is also a strong one of the city. The *Methodist Recorder*, the organ of the Methodist Protestant church, was founded in Ohio in 1839, but was finally located in Pittsburg in 1871. The *Christian Advocate* of the Methodist church has been referred to in another chapter of this work. The *Presbyterian Banner* was first published as the *Weekly Recorder* in Chillicothe, Ohio, in 1814, but was removed to Pittsburg in 1822. It claims to be the oldest religious paper in the United States. The *United Presbyterian* was first called the *Preacher* and published in 1842. It has absorbed several other papers and is now one of the strong religious journals of the country. The *Pittsburg Catholic* has been published regularly since 1844, and has a large circulation and influence in the church which publishes it, and is very frequently quoted by other papers on all moral issues.

CHAPTER XXXV.

Prominent Women of Pittsburg—Its Charitable Institutions.

Since these pages purport to be a history of Pittsburg and her people for the past one hundred and fifty years, we have thought it proper to intersperse the historical matter with short biographical sketches of the men of the past who have contributed greatly to the cities' glory. These will be found in the early chapters, in the Revolutionary period, in the Bench and Bar and medical chapters, etc. But in this connection we have written but little concerning the women of Pittsburg. In the few years covered by this work, woman's mission has undergone a great change, not only in Pittsburg but throughout the whole country. The ancient theory that men were lords of creation, has passed away, but it left its distinct mark on at least the first century of the cities' history. It is almost a fruitless search to look for a record of her work in the newspapers published prior to 1850, or indeed in publications of a much later date. They were regarded as housekeepers, who were able to perform some branches of church work, to add grace and beauty to the public audience, but there her mission practically ceased. The idea of the women of a city or of any community heading a public movement, was born of a later generation and is indeed almost purely the outgrowth of our present civilization. For these reasons, we are able to write but little of the women of the past. They must live and be known not by any specific record of their influence on their day and generation, but by character they transmitted to their descendant sons and daughters of the present.

No one who has not thoroughly investigated it can comprehend the work, particularly in the line of charity and along educational lines, that is now being done in Pittsburg by the women. To say that a noble woman of the city headed a movement which but a few months ago raised three hundred thousand dollars in a few days for the benefit of a religious institution, is but a line of the many pages which record the story of woman's work in Pittsburg. The men of Pittsburg have founded industries, constructed buildings and projected improvements, which have redeemed their names from oblivion, but the equally arduous and equally well performed work of women is less material in its nature and is consequently more readily forgotten. If, there-

fore, in the brief pages which follow, we can point out a few of the accomplished projects, not only of the women of the past but of the present as well, and preserve in some degree a record of her work, we shall feel abundantly repaid for the efforts put forth in this direction.

Mrs. Emma Sherwood Cote, first wife of Marcellin Cote, M. D., was pre-eminently a student of the French language. Among her translations were several medical works, which are masterpieces of English.

She was well known by the New England literary colony, and spent some time at Brook Farm, the social experiment which is referred to by Nathaniel Hawthorne in his "Blythedale Romance," in which Mrs. Cote is impersonated in the character of Priscilla, as a young girl with black eyes and brown hair. The fact was, she was in very poor health and her husband, Dr. Cote hoped for her recovery in the happy atmosphere of "Brook Farm," but she died soon after in Pittsburg, January 3, 1855, leaving one little daughter, Lucille, and her husband, the eminent Pittsburg physician, who is referred to elsewhere.

Mrs. Harmar Denny followed in the footsteps of her mother, Mrs. James O'Hara, who established a Relief Society for the Poor in the early days of Pittsburg. Mrs. O'Hara died April 8, 1834.

Mrs. Harmar Denny, born December 31, 1796, died January 18, 1878, was the mother of Mrs. Robert McKnight, Mrs. Paxton, Mrs. Brereton, Mrs. Spring and Miss Matilda Denny, all of whom may well be termed the pioneers in the organized charity work, which in the hands of its successors has attained to such wonderful dimensions.

For fifteen years and during the dark days of the war (1861-65) Mrs. Denny was president of the "Old Relief Society," assisted by Mrs. William Thaw, Mrs. William A. Herron, Mrs. Levi Wade and many other helping hands. The Pittsburg and Allegheny Orphan Asylum, founded in 1834 by Mrs. Harmar Denny, and of which she was first president, with Mrs. Mary Wilkins as vice-president, Mrs. Alan Campbell, secretary, and Mrs. William Robinson treasurer. The foregoing is the first regularly organized institution of Pittsburg and Allegheny, of which we have records, and continues to be a flourishing institution with Mrs. Letitia Holmes president at this writing (1907).

Mrs. Margaretta Wade Campbell Deland, author and poet, born in Allegheny, Pennsylvania, February 23, 1857, is the daughter of Semple Campbell and Margaretta Wade, was educated in a private school, and married Lorin F. Deland, of Boston, Massachusetts. She is the author of "John Ward, Preacher," "The Old Garden and Other Verses," "Phillip and His Wife," "Florida Days," "Sidney, the Story of a Child," "The Wisdom of Fools," "Old Chester Tales," "Dr. Lavender's People," "The Common Way," and other stories of equally high grade. It is probable that her "John Ward, Preacher" is her strongest novel.

Mrs. William Darlington, of Guyasuta, author, is a granddaughter of General O'Hara. Mrs. Darlington is pre-eminently literary in her tastes, and has written "Fort Pitt and Fort Duquesne," "The Journal of Christopher Gist," which was edited in conjunction with her husband, and she has also translated several works from the French.

Her three children, Mrs. Samuel A. Ammon, Miss Minnie Darlington, and Mr. O'Hara Darlington, are well known in Pittsburg, the former because of the deep interest she has taken in the less fortunate members of the human family throughout the country.

The father, Mr. William Darlington, who died some years since, collected one of the largest private libraries in Pennsylvania. Early records of Western Pennsylvania and American history in general was his special theme for study and collection.

Miss Jane Holmes died May 3, 1885. Her name is well known among Pittsburg residents, especially on lower Penn avenue, where she lived, as Lady Bountiful. She had her daily round of calls from her "poor friends." Along in 1880 a young girl, who was dying of consumption without friends or place of shelter, appealed to her for aid. No hospital would shelter her or any charitable institution give her a home; but she found a friend in Miss Holmes, who from the day she took her to care for, began to dream and plan for a haven of rest for the last days of her brothers and sisters struck with incurable maladies. Thus her dream and plan was realized, when she completed and endowed the "Home for Incurables," for men, women and children, on Butler street. She also founded the Children's Hospital on Forbes street, the Protestant Home for Boys in Allegheny, the Home for Colored Women, and the Episcopal Home, and many other institutions owe large endowments to her bounty. She gave to charity over a million dollars.

Miss Jane B. Holmes. Miss Holmes' high ambition fell almost, it seems, by inheritance, on the shoulders of a relative and namesake, Miss Jane B. Holmes, who came from Baltimore to reside in Pittsburg shortly before her cousin's death. She was a very active worker and gave her time and money joyfully for the founding of the Home for Aged Protestant Women, and later, as necessity arose, she assisted in founding the Home for Aged Protestants. She gave one hundred thousand dollars to institutions while she lived, besides giving all her time and thought for the betterment of mankind. She regarded it as her highest duty to distribute the money in her possession among the needy, and her belief is exemplified in her last will and testament. She succeeded Mrs. Felix R. Brunot as president of the Home for Aged Women, which office she held until her death in October, 1893.

She was president during the same period of the Home for Aged Protestants, to which she bequeathed twenty-five thousand dollars. To the Home for Aged Protestant Women she bequeathed ten thousand dollars. Her

special legacies in cash, amounting to about $150,000, are given to various institutions, and they are also made the residuary legatees of her estate. During her life time she made one gift of $100,000. The value of her estate has not been given to the public—or was not known at the time her will was made.

BENEFICIARIES UNDER WILL OF MISS JANE HOLMES.

	Bequest.	Received.
Home for Aged Protestants	$ 25,000	$ 87,500
Western Pennsylvania Hospital for Medical and Surgical Purposes	10,000	35,000
Home for Aged Protestant Women	25,000	87,500
Protestant Orphan Asylum, Allegheny	25,000	87,500
Pittsburg and Allegheny Home for Friendless	50,000	175,000
Homeopathic Hospital	10,000	35,000
Pittsburg Free Dispensary	10,000	35,000
Western Pennsylvania Institute for Deaf and Dumb	25,000	87,500
Domestic and Foreign Missionary Society of the Protestant Episcopal Church	10,000	35,000
Western Pennsylvania Humane Society	5,000	5,000
Protestant Home for Incurables	50,000	175,000
Home for Aged Colored Women	5,000	5,000
Home for Colored Children	10,000	35,000
Church Home Association	10,000	35,000
Protestant Home for Boys	50,000	50,000
	$320,000	$970,000

During her lifetime, before her will was drawn, she created the Home for Incurables, giving the

Land, valued at	$100,000
The building, valued at	65,000
and an endowment of	95,000

We have no record of her many gifts to other charitable intsitutions, but they were large.

Mrs Judge Samuel Jones was identified with a great many large undertakings for the benefit of various charities. Some of her most notable successes were: The Sanitary Fair (1864), The Pittsburg Library Loan Exhibition, The Bazaar of Nations, Relief Committee for the Benefit of Chicago Fire Sufferers, The Centennial Tea Party. She also inaugurated the Annual Tea Party for the benefit of St. Paul's Orphan Asylum. Old Pittsburgers must remember the Loan Exhibition with pleasure, since it disclosed to them the wealth of the city in rare books and manuscripts, rare and beautiful articles of all description. Many will continue to hold Mrs. Jones' memory sacred for her humanity and ability in taking hold and carrying through all of the foregoing

uplifting and very successful enterprises with the assistance of many prominent women. Mrs. Jones died October, 1, 1889.

Miss Sarah Hutchins Killikelly, author and musician, was born in Vincennes, Indiana, January 1, 1840, and was a daughter of Rev. B. B. Killikelly and Mary Brown. She was graduated from Eden Hall Seminary, Pennsylvania. She is a member of Foundation Fellow Society, science, letters and art, London. Received from this society gold crown prize for papers on Victorian Era, in 1897 (jubilee year). Author of "Curious Questions in History, Literature and Art" (three volumes), "Nineteenth Century History of Pittsburg." She resides on Highland avenue, E. E., and is still an active worker.

Mrs. S. K. Lippincott (Grace Greenwood). Mrs. Lippincott was a Miss Sarah Jane Clark, of New Brighton, Beaver Valley, Pennsylvania. Prior to her marriage she was noted for her fondness of horseback riding, and was beyond doubt one of the most skillful and fearless equestriennes. In fact the inspiration of some of her finest poems was drawn from some of her daring rides through the wild ravines and romantic crags that crown the lovely Beaver Valley. She later achieved a wide reputation in the field of literature. She lived in Philadelphia after her marriage, writing for journals of her day and publishing her "Recollections of Childhood" and other works, "Life of Queen Victoria," "Greenwood Leaves," poems, etc. She was born September 23, 1823.

Mrs. Eva Henrietta Leech. The Hermans Institute, of Penn avenue, Pittsburg, was established by Mrs. Eva Henrietta Leech in the year 1838, and afterwards carried on by her daughters the Misses Sally, Maria, Rebecca and Henrietta.

A Golden Jubilee. The semi-centennial of this celebrated institution, which was supported by all the early Pittsburgers of note, was held at "Kilbuck," the residence of Mrs. Robert McKnight, on November 8, 1888. Miss McKnight called the names of six hundred women who had attended this institution during the fifty years of its existence (1838-1888). This roll included the absent ones and those numbered among the dead. Two hundred responded "present."

Miss Julia Harding was assigned the pleasant duty of reading the testimonials of affection from the absent ones; these included a poetical remembrance by Mrs. Betty Black Wister, entitled "Jubilee Greeting." A history of Pittsburg would be sadly incomplete without some slight recognition of this old and much beloved institution, the memory of which is dear to the hearts of many mothers and grandmothers of Pittsburg to-day.

Mrs. Samuel McKee is a Lady Bountiful in the variety and extent of her charities. She is connected with many organizations, being first vice-president of the Women's Christian Association and branches; president of the

Home for Aged Protestant Women, and also Temporary Home for Women, and chairman of the Sunshine Committee of the Western Pennsylvania Hospital. She was one of the founders of the Woman's Christian Association in 1861, and was active in assisting at the Sanitary Fair, and chairman of the Soldier's Monument Committee, laying the cornerstone for the monument on Monument Hill, Allegheny. She resides at the Kenmahr Hotel, East End.

Mrs. Jane Gray Swisshelm. We have several times quoted from Mrs. Jane Gray Swisshelm who was certainly the greatest literary figure of Western Pennsylvania among women. A record of Pittsburg's gifted women that did not include her name would be woefully incomplete. The story of her life is thrillingly related by herself in her book, "Half a Century." As a newspaper writer she was always aggressive, bold, forceful and typical. To those who did not, equally with those who did fall in with her radical views, she was never less than interesting. She freely ventilated subjects that are usually glossed over, or at the most vaguely referred to, and spoke out in right plain language too, hitting right and left with little concern as to whose skeleton she might be revealing to his neighbor's gaze. She was one of the pioneer Abolitionists, one of the foremost and most indomitable champions of the Woman's Suffrage movement and at one time a publisher of a newspaper. In her own estimation she was by nature intended for an artist but owing to the cares and repressions of her uncongenial married life, the talent never found vent. The well known incompatability between herself and husband after years of unhappiness resulted in the divorce which left her free to follow out her ideas and inclinations.

Mrs. John H. Schoenberger. Mrs. Margaret Schoenberger was born May 20, 1810, and died August 30, 1878. In her day there was not a better known worker in Pittsburg in benevolent matters than Mrs. Schoenberger, and her praises are yet sung by those who knew her, who revered her and who labored with her. Her home was the once handsome mansion on Penn avenue where the Pittsburg Club is now established and its hospitable doors were never closed to the worthy poor and needy who asked her for assistance. St. Margaret's Hospital, situated near Butler street, was erected to her memory, by her husband, the late John H. Schoenberger. She was one of the founders of the Episcopal Church Home, of Penn avenue, near the old arsenal. Mr. and Mrs. Schoenberger were active Christians, interested in all benevolent and educational work in the early days of Pittsburg and both should long be remembered.

Mrs. Wm. Thaw. Mrs. Thaw is well known for her kindly beneficence. She found boundless opportunities in one of her special fields, "The Society for the Improvement of the Poor;" her husband, Mr. Wm. Thaw joined her in

her work for the betterment of thousands of poor and sick men, women and children, in their homes, and general assistance. Worthy Christian workers—missionaries, both home and foreign, have found in her home a delightful haven of rest for weeks at a time. She also gives largely to science and education generally, notably to the Allegheny Observatory. She is president of the woman's board of managers of the Homeopathic Hospital. Her fine presence, her intelligence and great heart full of sympathy and love enable her always to see the bright side of life. Mrs. Thaw was Miss Mary Copley, daughter of the late Josiah Copley, who was at one time editor of the Pittsburg *Dispatch*.

Frances Elizabeth Willard, born near Rochester, New York, September 28, 1839, died February 17, 1898. The Methodist College of Pittsburg, proud to mention among its teachers in 1861-1862, the name of Miss Frances Elizabeth Willard, who afterward became famous as a temperance worker and author. Her most active work was done near Chicago, where she had been President of the Evanston College. In 1874 she resigned to join the Woman's Christian Temperance Union. In 1879 she was elected president, which position she held until her death. Among her literary productions are "Glimpses of Fifty Years," "Woman and Temperance," with one of Abraham Lincoln, a statue of Miss Willard was placed by Illinois in Statue Hall in Washington and she is the only woman who is thus distinguished.

The Pittsburg and Allegheny Free Kindergarten Association was organized November 30, 1892, in the Young Men's Christian Association parlors, East End. Mrs. William A. Herron was elected first president, and continued to fill this office with dignity and wisdom until her death, December 21, 1903. Mrs. James I. Buchanan, the first secretary of the association, was elected to the presidency on the death of Mrs. Herron.

The charter members were: Louisa J. Herron, Elma D. Thaw, Sarah H. Killikelly, Sallie R. Clark, Margaret L. Patterson, Sallie N. Arbuthnot, Maria L. Card, Isabella Wallace, Mary L. Laughlin, Alice J. Dickson, Eliza Macfarlane, Mary B. Dilworth, Emma V. Adams, Martha E. Frew, Ella L. McKelvy.

Four kindergartens were opened the first year, the first of these being the "Alice Macfarlane Memorial," in memory of Miss Alice Macfarlane, who conducted the first free kindergarten in Pittsburg. On the opening morning, January 23, 1893, two children were present; at the end of the second week there were forty-five children, representing almost all nationalities.

Mr. D. H. Wallace and his sister, Isabelle, took the initiative in founding and supporting a kindergarten in memory of their father, Daniel Wallace. This kindergarten was opened October 4, 1893, in the Springfield School. Mrs. Nelson P. Reed established a kindergarten February 18, 1893, in the Minersville School, in memory of her infant son, Nelson P. Reed. Mr. and Mrs. John Z. Speer established a memorial kindergarten September 3, 1900,

in the Friendship School, in memory of their daughter, Elinor McKnight Speer. This has since been removed to the Linden School.

The Columbian Council of Jewish Women founded a kindergarten February 11, 1895, in one of the city's most needy districts.

On April 27, 1903, Mrs. Carnahan, her daughters and son established the Jay Wilson Carnahan Memorial Kindergarten, in memory of a beloved father. This gift came with the request that the kindergarten be placed in one of the poorest districts in our city. Mr. and Mrs. M. Oppenheimer established a kindergarten April 10, 1905, in the Columbian Council Settlement House, Center avenue, in memory of their daughter, Nannie Oppenheimer.

On September 3, 1906, the Association established the Georgia Allison Memorial Kindergarten, in the Kindergarten College Building, as a tribute of love to Miss Georgia Allison, Supervisor of Kindergartens from September, 1896 until her death, November 6, 1905. The development of the work has been normal and gradual, the Association to-day supervising forty-eight kindergartens in Pittsburg, twenty-four in Allegheny, and eight in suburban towns, reaching not only the children enrolled, but the homes from which they come, by the regular Mothers' Meetings held each month, and by the 8,000 and more visits made by the kindergartners to the homes.

The treasurer's first annual report, made in 1893, shows receipts, $2,914.82; disbursements, $2,845.52; balance, $69.30. The report for year ending October 31, 1906, shows total receipts, $73,475.47; disbursements, $71,388.52; balance, $2,086.95.

The Association maintains a College for Training Kindergartners, with an enrollment of thirty Juniors and thirty-nine Seniors, and an Alumnae of one hundred and ninety-four. The influence of the work of the Association has reached beyond the city and its immediate vicinity, though it is yet in its infancy.

The Woman's Club of Pittsburg was the first woman's club organized in Pittsburg or Allegheny. It was founded in November of 1875, by Mrs. Helen P. Jenkins, Mrs. Charles I. Wade, Mrs. M. O. Roberts, Mrs. George Barret, Mrs. L. C. McCullough, Mrs. Max Becker and Miss Fannie Kyle, with Mrs. Helen P. Jenkins as president.

The idea of a woman's club in Pittsburg first emanated from Mrs. Charles I. Wade (otherwise known as Bessie Bramble). A meeting of women had been called by Mrs. Felix R. Brunot, which was to have been addressed by a young divinity student. The young man failed to put in an appearance and the women not being permitted to speak, the afternoon was spent in silent thought. But the meeting was nevertheless to some purpose. The absurdity of a state of affairs where intelligent women were not allowed to give expression to their thoughts appealed strongly to Mrs. Wade's sense of justice. She conceived the idea of banding together some few congenial spirits for study and mutual exchange of thought, the result being the Woman's Club of Pittsburg. Of this club she afterwards was president for a number of years and is now its honorary president. The club was first purely a literary organization, but later on,

broadened its scope, gradually assuming its share of the social and civic reform movements of the city. Other women's clubs, nearly all of which work along philanthropic lines, as well as in art, music and literature are: The Twentieth Century Club, the Woman's Club of Sewickley Valley, the New Era Club, the Travelers, the Tourists, the Epoch, the Tuesday Musical Club, the Woman's Clubs of Ben Avon, Bellevue, Homestead, Braddock, Wilkinsburg, Edgewood, Knoxville, Carnegie, the Sorosis, the Colloquium Club, the Council of Jewish Women, the Allegheny County Equal Rights Society, which includes six separate clubs; the Pittsburg Colony of New England Women, the Woman's Southern Society, the Colonial Club, the Vittoria Colonna Club, the Alliance Francaise, the Germanic Club, the Daughters of the American Revolution, the Colonial Dames, the Dolly Madison Chapter of the Daughters of 1812, the Keystone Chapter of the Daughters of the Pioneers, the Teachers' Art Club. The Pittsburg and Allegheny Playgrounds and Vacation School Associations and the Free Kindergarten Association.

Mrs. William A. Herron and Mrs. William Thaw were the founders of the Pittsburg Association for the Improvement of the Poor. The first meetings were informal and held in the parlors of Mrs. Herron's Penn avenue residence, conferring with interested prominent citizens, in the fall of 1875. The central office was opened December 29th of the eve of the Centennial year.

Mrs. W. A. Herron, President until her death, 1903.
Mrs. L. M. Harding, vice-president.
Mrs. Ellen C. Woods, treasurer.
Mrs. John Magoffin, secretary.
Mrs. William Thaw.
Mrs. Aaron Hartupee.
Mrs. W. R. Murphy.
Mrs. J. S. Collins.
Mrs. H. M. Rolfe.
Mrs. Leonard Johns.
Mrs. M. C. Irwin.
Mrs. Samuel McKee.
Mrs. R. S. Warring.
Mrs. Holland Riddle.
Mrs. M. McBrunn.
Miss Sallie McCormick.
Mrs. George J. Duff.
Mrs. Charles Zug.
Mrs. Jane T. McElroy.
Mrs. Thomas Ewing.
Mrs. Archibald McBride.
Mrs. D. A. Carter.
Mrs. H. L. Mason.
Mrs. C. B. M. Smith.

Central office was started at 92 Liberty street. Within a year the Lawrenceville branch office, was opened; then one at Oakland; then at South Side; and later at East Liberty.

After the Days' Excursions in the summer had been inaugurated, the managers decided that the establishment of country week work would be more beneficial, and children were sent for a two weeks' vacation in the country: after two years a home at Oakmont, with three acres of ground was given by Mr. Meeds of the Dollar Savings Bank, and this home has been the center of fresh air work since 1888. In this line the managers, through the generosity of a lady interested in the welfare of working girls, caused arrangements to be made for their two weeks' vacations during the mid-summer months.

The Children's Temporary Home and Day Nursery was established in the Old Gilmore Mission Building, opening November 8, 1881. Continuing the work they are now in a commodious and suitable building on Center avenue. Last but very important was the establishing of the hand-work laundry on Collins avenue, which is now self-maintaining.

The Association work has been done by women almost entirely, and at present is being carried on by women as managers, superintendents and visitors.

There are eleven visitors, daily visiting in the homes of the poor; secretaries and superintendents in the five offices, eight women; laundry, one superintendent, one bookkeeper; Children's Temporary Home, matron and nurse; Fresh Air Homes, matrons and assistants (three months); Working Women's Vacation, boarding at farm houses; in all twenty-five women.

Mrs. S. E. Lippincott, of Howe street, seems by nature designed for the responsible position she holds. She is, and has been, superintendent and secretary of the Society for the Improvement of the Poor ever since its inception in December, 1875. Her tact, discrimination and rare judgment are constantly being brought into play, with the happiest possible results. She is the daughter of Samuel McMasters, an old and representative Pittsburger. She has reports which may be seen in the libraries.

The reports show to what enormous proportions the work has grown under her able supervision. She is still an active worker.

Mrs. Louise Jannette Herron was born in Amesbury, Massachusetts, July 29, 1821 (was the only child of Dr. and Mrs. Rufus Hiels), and died December 21, 1903, in this city. A lady of fine presence and personality, one of independent thought, keen sensibilities, cordial in manner and approachable to all, especially to those in need of practical sympathy, and possessing the rare gift of being able to "put herself in other people's places," especially so with the poor, unfortunate and overtempted, her patience with whom was saintly. Her deeds of kindness and words of encouragement to those who felt disheartened and alone were full of inspiration and incentive to hope and faithful living.

"Her memory is Blessed."

Mrs. Herron was identified with the work for humanity always, but pre-eminently for women. During the Civil war, she was active in the Sanitary Fair, and was identified with the relief society of which Mrs. Harmar Denny was president; was one of the first managers of the Woman's Christian Association of which Mrs. Felix R. Brunot was president and earnestly engaged in establishing its first distinctive branch, "The Home for Destitute Women," realizing that there was no open door for this unfortunate class in other benevolent institutions, she gave her time and energy to establish a home on Chatham street near Wylie avenue.

In the winter of 1875, a trying one on the poor, and the benevolent citizens of Pittsburg, her private residence on Penn avenue, near Fourth street, was one of those besieged for charity, making demands on her time and resources to such a degree that she felt the imperative need of having investigation to give intelligently to those who might be innocent sufferers or to deal harshly with imposters. Working on this conviction, a number of persons were invited informally to meet in her parlor, where plans were considered and afterward consummated and "The Improvement of the Poor" opened its central office, and for nearly thirty-two years has continued its beneficent work, the result of the joint labors of its founders, Mrs. William A. Herron and Mrs. William Thaw.

THE CENTRAL YOUNG WOMEN'S CHRISTIAN ASSOCIATION OF PITTSBURG AND ALLEGHENY.

Every movement among people for their betterment has had a small beginning somewhere, and the Central Young Women's Christian Association of Pittsburg and Allegheny is no exception to this rule. It was the outgrowth of several series of entertainments given during the winter of 1888-89 and 1889-90 for the purpose of cheering and brightening the lives of young women who spent long hours every day at work, and at night hurried to crowded and dreary homes. After these a meeting was called for Monday evening January 13, 1890, in the dining room of the Fourth Avenue Baptist Church, Pittsburg to consider what ought to be done for the young women of our cities. Four women responded to the call, Mrs. M. F. Hutchins, Mrs. Johnston, Mrs. Sarah McWhinney Burchfield, and Miss Caroline Martin. After prayer and consultation it was decided to call a meeting for January 24th, in the Second Presbyterian Church, Pittsburg. Few came and another meeting was appointed for the following week in the Second United Presbyterian Church, Allegheny.

These meetings were held and the number in attendance slowly increased until early in May, 1891, when a meeting was held in the Lecture Room of Carnegie Hall, Allegheny. Miss Caroline Martin was chairman of this meeting and Miss Jeanette Kennedy secretary. After Scripture reading and prayer the State Secretary, Miss Hattie E. Dyer was introduced and in an informal talk explained the work of the city and town organizations for young women. On motion of Miss Sarah E. Pence it was here decided to organize a Young Women's Christian Association in Pittsburg, and a constitution for city and town Associations was adopted, with the privilege of changing or amending. Other meetings followed and on the 12th of June, 1891, the following officers were elected:

President, Mrs. Wm. R. Thompson; First Vice-President, Mrs. H. K. Porter; Second Vice-President, Mrs. A. H. Norcross; Treasurer, Mrs. J. L. Lewis; Recording Secretary, Miss Annie D. Robinson.

In September, 1891, Mrs. Thompson found it necessary to resign and Mrs. James B. Scott was elected President in which office she served until May, 1896. Miss Sarah E. Pence was Mrs. Scott's successor and was the beloved President of the Association until her death which occurred May 19, 1905.

The Association first occupied two rooms at 392 Penn avenue, where the formal opening was held December 17, 1891. In April, 1892, the house at 421 Penn avenue, now the site of the Lincoln Hotel, was taken. In 1894 larger quarters being needed the residence of Mr. William Thaw, Sr., 120 Fifth street, was secured.

In April, 1895, an organization was formed on the South Side, which two years later became a Branch of the Central Association. In October, 1902, a Branch was organized at Lawrenceville, and still later came a call from Wilmerding which was answered.

A new era now opens in the history of this Association. October 4, 1905, Mrs. John G. Holmes, the first vice-president, was elected president, and it was owing to her splendid enthusiasm and inspiring leadership that the consummation of the hopes and prayers of this body of workers was reached. On April 30, 1907, a Whirlwind Campaign for a Building and Endowment Fund was inaugurated, and in eleven days the sum of $189,000 was collected, Mrs. Holmes having previously through her own efforts secured $112,000. This sum of $300,000 was needed to meet the generous offer made by Mr. H. C. Frick of $100,000 for a building, the Association to secure $200,000; $100,000 of which was to be used as an Endowment Fund. These conditions were met by the generous citizens of Pittsburg. A new building will soon be erected on the site previously purchased on Chatam street.

Some statistics for 1907: Membership—Central, 1,685; South Side, 430; Lawrenceville, 380; Wilmerding, 131; total membership, 2,626. Students enrolled—Bible, 743, physical training, 380; domestic science, 265; domestic art, 629; educational, 124; total, 2,141. Lunches served during 1907, 77,543; dinners 18,009; transients, 539; regular boarders, 53.

In previous pages we have referred to Felix R. Brunot as one of Pittsburg's noted philanthropists, but in all his work he was strongly supported by his wife, Mrs. Mary Ann Hogg-Brunot. Almost from her youthful days she gave a large part of her time to philanthropic work. It was her life-long habit to rise at six in the morning, doing so, she said because she had so many things to attend to which could not be accomplished if she allowed herself a morning nap. She dressed with a quaint old-fashioned simplicity, and though the materials of her garments were always handsome, they were those which exactly suited her sweet, kindly face.

She was president of the original Women's Christian Association from its inception until her death, thirty-one years afterwards. Much of the charitable work done for the last fifty years in Pittsburg and Allegheny owes its inspiration to her interest and timely aid, and the knowledge of what she has

done has been a stimulus not only in America but in foreign lands. She was a member of the City Board of Charities and as such was brought in contact with men who are accustomed to deal with problems of social and moral import. A devoted member of the Protestant Episcopal church, she saw the opportunity of furthering the cause of missions by the women of the church, and in 1880 she lent her influence to the founding of the Pittsburg branch of the Woman's Auxiliary to the Board of Missions. For some years she was its active secretary. She gave to charitable institutions not only her personal attention, but contributed largely of her wealth, one of the last acts of her life being to give thirteen thousand dollars for the untainted children of lepers in China. She was not only active in works in her own church, but her bounty overflowed to further undertakings in other churches which she felt were deserving of her assistance. Yet it was not her giving which aided them most, but the genuine earnestness of her example.

The Allegheny Orphan Asylum, a large flourishing institution, was a dearly loved object of her care and owed much of its success to her wise counsel as president of the board of managers. Interested in the temporal welfare of children, she was eager to have them trained and to have inculcated in them a broader missionary spirit, and in addition to her weekly Bible class she held a mission class which was a potent factor in the education of the young. The Widows' Home of Allegheny County was organized by her as a refuge for breadwinners who, unwilling to ask for alms or receive them, were wearing out their lives in miserable cellars or crowded houses striving to maintain their families, dreading the landlord's monthly claims which they felt to be their heaviest burden. These homes consist of sixteen buildings where one hundred worthy poor find shelter at a nominal rent. For nearly thirty years Mrs. Brunot was president of the Board of Managers. For fifty-three years she labored in the Society for the Relief of the Poor in Allegheny, being most of that time its president. By personal visitation and timely aid she brought cheer to the hearts of many heartbroken widows and orphans. She was deeply interested in the West Penn Hospital, in the Woman's Christian Association of Pittsburg and Allegheny, in the Temporary Home for Destitute Women, which was organized thirty years ago; in the Home for Aged Protestant Women, of which association she was a charter member and its president for two years, resigning because of the pressure of other duties; in the East Liberty Young Women's Christian Association; in the Colored Orphans' Asylum; in the Protestant Home for Women, of which she was president; in the Young Women's Boarding House, the object of which was to supply a home particularly for working women where they could be surrounded with the best influences; in the Home for Aged Protestant Couples,—in each of these institutions a gift of a thousand dollars from her was a starting point in their existence.

Those who knew her best could not fail to see how wonderfully strength of purpose and simplicity of character were blended in her life. The

secret of her power lay in the love she had for the unfortunate, springing from her great kindness of heart.

One of the most noted and useful women of modern years, or indeed in all Pittsburg's history was Miss Kate C. McKnight, who has but recently passed away. No tribute too high can be spoken of her life, so noble in its purpose and so sweet and true in its daily existence.

She was in a manner born independent and under circumstances that made it possible for her to lead a life of ease and social pleasure. Yet rather than to do this, she chose to devote her time, her influence and her strength to the advancement of those who were less fortunate than herself. With her it was never a question of what enjoyment she could get out of life, but what she could give and do for others. At a memorial service held in Pittsburg shortly after her death as a tribute of respect to her there were present representatives of all the organizations with which she was affiliated, many of which were founded and fostered by her. A limited number of those present made addresses on this occasion. It was a remarkable meeting and no woman of Pittsburg was ever paid so great an honor. The Mayor of Pittsburg, Hon. George W. Guthrie, spoke in the highest praise of her work for the improvement of civic conditions, and said that in paying honor to her memory the city did but honor itself. Representatives of the Newsboys' Home, the Juvenile Court, the Consumers' League, the Child Labor Association and of the Civic Club all told of the tower of strength she had been to them, both in the organization of their societies and during all the years of their existence.

The Congress of Women's Clubs and the City Federation paid high tribute to her loyalty, her wise counsel and her able support. The Business Women's Club and Young Women's Civic Club of Allegheny told of their gratitude to Miss McKnight. One of the leading characteristics of this noble woman was her patriotism as exemplified notably in her love of her native city, Pittsburg. On one occasion at a gathering each woman present was asked to speak for three minutes on her special hobby. Miss McKnight announced as her subject "Pittsburg, the City Beautiful."

Miss McKnight was descended from a long line of distinguished ancestors on both sides of her family. From them she derived a right to be a member of the Colonial Dames and a Daughter of the American Revolution. The reader of these pages is quite familiar with the noted names of her ancestors. They were General James O'Hara, Ebenezer Denny, Harmar Denny, William Wilkins and others. From these men, all of whom were great in Pittsburg in her early days, she inherited a keen interest and insight into matters concerning the advancement of the city, and from them she also inherited the high ideals to which she devoted herself with a consecration that made her totally unaware of the self sacrifice she was making. She was a member of the Twentieth Century Club of Pittsburg and gave it her hearty support and zealous interest. A short time before her death this club made her an honorary vice-president and this was the first time such an honor had been bestowed upon any one by the

club. There was throughout her entire life a blending of the good, the true and the beautiful in the character of Miss McKnight, and this was strengthened by a perfect and steadfast faith in the human family and in Pittsburg.

DIRECTORY OF CHARITIES IN PITTSBURG AND ALLEGHENY.

1. Newsboys' Home, Grant and Webster avenue, J. C. Kay, president.
2. Home for the Aged and Infirm Colored Women, Lemington avenue, Pittsburg, Mrs. Sarah Dorsey, president.
3. Western Penitentiary, Riverside, Pittsburg, Rev. J. L. Milligan, president.
4. Juvenile Court Association, Frick building, Mr. E. Z. Smith, president.
5. Public Wash House and Baths, Butler and Thirty-fifth streets, Mrs. D. C. Clapp, president.
6. Home for Aged Protestants, Wilkinsburg, Mrs. Thomas Mellon, president.
7. Reineman's Hospital, Millwood avenue.
8. Home for Colored Children, Herron avenue, Pittsburg, Mrs. Ormsby Phillips, president.
9. St. Paul's R. C. Orphan Asylum, Idlewood-Crafton, Rt. Rev. Regis Canevin, president.
10. St. John's Hospital, McClure avenue, Allegheny.
11. Passavant Hospital, Reed and Miller streets, Pittsburg, Rev. H. W. Roth, president.
12. Hospital for Children, Forbes street, Pittsburg, Miss Mary McKee, president.
13. Allegheny General Hospital, Allegheny, Rev. Dr. Alexander, president.
14. Mercy Hospital, Stevenson and Locust streets, Pittsburg, Mr. D. J. Callery, president.
15. Department of Charities, Pittsburg, J. T. Shaw, M. D., president.
16. Department of Charities, Allegheny, Mr. Simon Kirschler.
17. Municipal Hospital, Bedford avenue, Pittsburg, Dr. W. J. L. McCollough, president.
18. St. Francis' Hospital, Forty-fourth street, Pittsburg, Mr. A. D. Patterson, president.
19. Presbyterian Hospital, 1101 Ridge avenue, Allegheny, Mrs. J. L. Anderson, president.
20. Boy's Industrial Home, Oakdale, John McClelland, A. M., president.
21. Oakland Day Nursery, 235 Atwood street, Pittsburg, Miss Mary L. McKee, president.
22. Ladies' Relief Society, 602 Arch street, Allegheny, Miss Margilea Fish, president.
23. Pittsburg Sanitorium, Bedford avenue, Pittsburg, Dr. W. C. White, president.
24. Orphan's Home, Ridge avenue, Allegheny, Mrs. M. F. Reed, president.
25. Improvement of Poor, Federal street, Pittsburg, Mrs. Charles Zug, president.
26. Elizabeth A. Bradley Children's Home, H street, Hulton-Oakmont, Mrs. E. H. Utley, president.

27. Christian Home for Women, 1423 Locust street, Pittsburg, Mrs. Joseph Horner, president.

28. Children's Aid Society of Allegheny County, 43 Federal street, Pittsburg, Mrs. J. H. McLean, president.

29. Kingsley House, 3 Fulton street, Pittsburg, Mr. William Matthews, president.

30. Woods Run Industrial House, 1531 Irwin avenue, Allegheny, A. J. Bousalt, president.

31. East End Young Women's Christian Association, North Negley, near Hay street, Pittsburg, Mrs. J. J. Matthews.

32. First Allegheny Day Nursery, 3035 Perrysville avenue, Allegheny, Mrs. M. D. O. Anderson.

33. Pittsburg and Allegheny Home for the Friendless, 423 Washington street, Allegheny, Mrs. James Aiken.

34. Children's Home Society of Pennsylvania, 319 Third avenue, Pittsburg, Dr. J. W. Fawcett, president.

35. Curtis Home, Breckenridge avenue, Pittsburg, Mr. W. E. Hammett, president.

36. St. Barnabas Home, 2322 Brownsville Road, Carrick, Pennsylvania, Mr. G. P. Hance, president.

37. Deaconess' Home, 2000 Fifth avenue, Pittsburg, Miss M. T. Boswell, president.

38. Pittsburg and Allegheny Protestant Orphan Asylumn, Ridge and Grant avenues, Allegheny, Mrs. Letitia Holmes, president.

39. Humane Society, 440 Sixth avenue, Pittsburg, Mr. Jno. G. Walter, president.

40. Pittsburg Home for Babies, 2501 Center avenue, Pittsburg, Mrs. Mary F. Pickering, president.

41. J. M. Gusky Hebrew Orphanage Home, Perrysville avenue, Allegheny, Hon. Josiah Cohen, president.

42. Florence Crittenden Home, 1852 Center avenue, Pittsburg, Rev. D. C. Martin, president.

43. German Protestant Home, Fair Oaks, Pennsylvania, John Dimling, Esq., president.

44. Episcopal Church Home, Penn avenue and Fortieth street, Pittsburg, Mrs. F. H. Bissell, president.

45. Protestant Home for Incurables, 5600 Butler street, Pittsburg, Mrs. Andrew Long, secretary.

46. Columbia Hospital, Penn avenue and West street, Wilkinsburg, Mrs. George Sands, chairman.

47. Allegheny Visiting Nurses' Association, Arch street, Allegheny, Mrs. Ormsby Phillips, president.

48. Christian Home for Working Girls, 1235 Liberty avenue, Pittsburg, Mr. J. W. Houston, president.

49. Eye and Ear Hospital, 1945 Fifth avenue, Pittsburg, Mrs. William Scott, president.

50. Sunshine Society, 831 South Negley avenue, Pittsburg, Miss Emily Cowan, president.

51. Seraphic Work of Charity, 220 Thirty-seventh street, Pittsburg, Father Chrysostom, St. Augustine Church.

52. Institute for Deaf and Dumb, Edgewood. Prof. Burt, superintendent.

53. Home for Aged Protestant Women, Wilkinsburg, Mrs. Samuel McKee, president.

54. Protestant Home for Boys, 203 Anderson street, Allegheny, Mrs. D. M. Ure.

55. Nurses Directory, 43 Federal street, Pittsburg, Miss Duncan.

56. Passavant Home for Epileptics, Rev. Dr. W. L. McEwan.

57. Western Pennsylvania Institute for Blind, Bellefield avenue, Pittsburg, H. Kirk Porter, president.

58. Columbian Counsel School, 1835 Center avenue, Pittsburg, Mr. A. Leo Weil, president.

59. Young Woman's Christian Association, Fifth street, Pittsburg, Mrs. John G. Holmes, president.

60. Young Woman's Christian Association Boarding Home, 430 Duquesne Way, Pittsburg.

61. Industrial Home for Crippled Children, Denniston avenue, Miss M. I. Laughlin, president.

62. Homeopathic Medical and Surgical Hospital, 408 Second avenue, Pittsburg.

63. Roselia Foundling and Maternity Home. Cliff and Manilla streets, Pittsburg.

64. Pittsburg Hospital, Beechwood avenue, Pittsburg, Sister Mary Francis.

65. Young Womens' Friendly Institute, 122 S. Sheridan ave., Pittsburg.

66. Bethesda Home, 1315 Locust street, Allegheny, Mrs. Henry Clay Howard.

67. Woman's Christian Association, 210 East Stockton avenue, Allegheny, Mrs. Marion Scott, secretary.

68. Allegheny Play Grounds Association, Mrs. John Cowley.

69. Pittsburg Play Grounds Association, 413 Bijou Building, Pittsburg.

70. Business Women's Club, Arch street, Allegheny, Mrs. John Cowley.

71. Farmington Aid Society, Mrs. Maitland Alexander, president.

72. Aged People's Home, Mrs. J. D. Frazier, corresponding secretary.

73. Western Pennsylvania Hospital, Twentieth street, Pittsburg.

74. Pittsburg Free Dispensary, 43 Federal street, Pittsburg, Mr. George, K. Stevenson.

75. Allegheny Free Dispensary, 117 West Ohio street, Allegheny, Mrs. Jasper Porter.

76. Western Pennsylvania Consumer's League, 5412 Howe street, Pittsburg, Mrs. W. Haskin.

77. Home of Little Sisters of the Poor, 501 Washington street, Allegheny.

78. Home for the Aged Protestant Women, Rebecca avenue, Wilkinsburg.

79. Home for Aged Couples, Swissvale avenue, Wilkinsburg.

80. St. Joseph's Society for Care of the Sick and Poor, Webster avenue and Tunnel street, Pittsburg.

81. Fruit and Flower Mission, 43 Federal street, Pittsburg, Miss Emily Morehead, secretary.

82. Volunteers of America, 226 Sixth avenue, McKeesport, Col. Herron, president.

83. Hospital Saturday and Sunday Association, 43 Federal street, Pittsburg, Prof. W. M. McCollough.

84. Brunot Boarding Home for Young Women, 214 Stockton avenue, Allegheny, Mrs. Jno. Anderson.

85. Milk and Ice Association, Pittsburg, Mrs. Enoch Raub.

86. Church Army, 144 Park avenue, West View, Allegheny, Mrs. J. K. Bakewell.

87. St. Michael's Orphan Asylum, 53 Pius street, Pittsburg.

88. Anthony Memorial Club House, 5524 Stanton avenue, Pittsburg, Mrs. J. L. Koethen.

89. Athalia Daly Home, Gross street, Pittsburg, James I. Buchanan, president.

90. Soho Bath Settlement, Fifth avenue, Pittsburg, Mrs. J. C. Dick.

91. St. Vincent de Paul Society, Pittsburg, Rt. Rev. Regis Canevin.

92. Catholic Women's League, 347 Fifth avenue, Pittsburg, Mrs. Theresa Popp.

93. South Side Hospital, Twentieth and Mary streets, Pittsburg.

94. Salvation Army, Seventh street and Penn avenue, Pittsburg, Major Andrews.

95. Phipps Gymnasium and Bath House, School and Rebecca streets, Allegheny.

96. St. Regis Home for Working Girls, 1006 Ann street, Pittsburg.

97. East End Visiting Nurses' Association, 424 Denniston avenue, Pittsburg, Mrs. A. J. Logan.

98. Woman's Guild, Bartlett street, Pittsburg, Mrs. J. Ledlie Gloninger.

99. St. Joseph's Orphan Asylum, Troy Hill, Allegheny, Rev. C. Weismann.

100. St. Joseph's Protectory, 552 Vine street, Pittsburg, Rev. J. Rockafelder.

101. Presbyterian Hospital, Montgomery avenue, Allegheny.

102. Eye and Ear Hospital, 403 Winebiddle avenue, Pittsburg, Mrs. C. B. McLean.

103. Department of Charities and Corrections, 1634 Fifth avenue, Pittsburg, J. P. Shaw.

104. Free Home for Convalescent and Incurable men.

CHAPTER XXXVI.

The Daughters of the American Revolution—The Old Block House.

If it be correct to measure the potency of a society or an organization by its effect upon the community, by the number of things accomplished, or by the good work it has performed, then the Pittsburg Chapter of the Daughters of the American Revolution must take the highest rank. It was organized largely through the efforts of Mrs. Julia K. Hogg on June 10, 1891. The work has been conducted up to date (1908) under five regents: Mrs. Julia K. Hogg, Mrs. Albert Childs, Mrs. Park Painter, Miss Matilda Denny and Mrs. Edith Darlington Ammon. A requisite to become a member of this society is to be able to trace one's ancestry back to the Revolution and to one who in some way assisted in securing the independence of the American colonies. The Pittsburg Chapter, at its formation, numbered seventy-five members and they were leaders among the intellectual and cultured women of Pittsburg and Allegheny. Soon after its organization Mrs. Mary E. Schenley, of London, England, became a member of the Pittsburg Chapter. She, it will be remembered, was a granddaughter of General James O'Hara and through her mother, his daughter Mrs. Mary (O'Hara) Croghan, had inherited the historic Block House built by Colonel Henry Bouquet, as a protection against the Indians in 1764. The society soon after its organization, at the suggestion of Mrs. James B. Oliver, appointed a committee to wait on Mrs. Schenley to suggest to her the propriety of her selling or donating the plot of ground containing this historic memento to them. The good woman very generously agreed to present this historic spot to them. The chapter accordingly obtained a charter so that they might comply with the law of the state of Pennsylvania, which required all such organizations owning real property within the state to be duly incorporated. This charter was granted to the chapter in the name "Daughters of the American Revolution, of Allegheny County." The deed from Mrs. Schenley bore date of March 15, 1894, and conveyed to the corporation the Block House and a plat of ground surrounding it, 90 by 100 feet, fronting on Fort street; and also a strip of ground, 20 by 90 feet, fronting on Penn avenue, and extending back to the larger lot of ground on which stood the Block House. The larger lot of ground, 90 by 100 feet, was, there-

fore, bounded on the west by Point alley and on the east by Fort street. On the narrow strip of ground, 20 by 90 feet, fronting on Penn avenue, was a brick dwelling house, the rental of which was for many years used in sustaining the Block House and grounds, which were regularly kept open to the public after they came into the possession of the Daughters of the American Revolution. When the property was transferred to the Daughters, O'Hara avenue had been located on its northern line but had not been opened.

In November, 1901, Mrs. Schenley's agent had presented a petition to the Pittsburg Councils, asking that Point alley and Fort street be vacated. To make matters worse the ordinance locating O'Hara avenue had been repealed by the city authorities. These movements were purely in the interests of a "Warehouse Syndicate," which proposed to erect buildings eight or ten stories high on land surrounding the Block House property, thus spoiling the little park around the old monument, and rendering it accessible only by the strip of land 20 by 90 feet. The Daughters importuned the recorder not to sign the ordinance, but were powerless to prevent him from doing so.

The warehouse syndicate, which was in reality the Pennsylvania Railroad Company, then made the following proposition to the Daughters. First, they would remove the Block House to Schenley Park and put a fence around it. Second, they would give the Daughters $25,000 for the property, the Block House to be removed and the site marked by a tablet. Third, they would give a piece of property of about the same size, on the southern side of Penn avenue, in exchange for their property, the Block House to be removed to it. The reply of the Daughters was that the Block House and the surrounding ground had been given to them to be maintained by them and their successors forever, because of its historic associations, and to remove it to any other place would destroy its value as a memento of the Colonial days. The property owned by the Daughters as given them by Mrs. Schenley and improved by them was valued at over one hundred thousand dollars, aside from its historical associations.

In this proceeding the Daughters watched their interests very closely. They discovered that the petitions presented to the councils for the vacation of Fort street and Point alley had not been legally signed, one signature being that of a representative of the syndicate not being an owner of record; the other, the attorney in fact for Mrs. Schenley, whose power of attorney as recorded did not give him authority to sign such petitions. The Daughters, therefore, on February 15, 1902, filed a petition praying the Court of Common Pleas of Allegheny County to declare the vacating ordinance null and void. A bill in equity was also filed by them on the same date, and the syndicate's demurrer to it was overruled on March 8. The case was finally argued in June, and on June 21 the court gave a decision in favor of the Daughters, declaring the petitions to vacate Fort street and Point alley null and void, and quashing the ordinance. This matter was carried to the Supreme Court where it was argued in November, 1902, and in January, 1903, the decision of

the court below was reversed, which in the end, resulted in vacating Fort street and Point alley.

The Daughters also petitioned the city to acquire land around the Block House to be used as a public park. The petition was signed by them and by more than 150 prominent property owners, and was presented to the councils on January 27, 1902. It was referred to a committee which reported favorably on March 8, and it was approved by councils on March 27. But the new councils, organized in April following, did not revive the petition. The purpose of the Daughters was to have the city purchase land enough to form a Block House Park. This would have included part of the ground on which Fort Duquesne stood, which would have preserved the most historic spot in Western Pennsylvania. But in February, 1902, a body of land containing nine and a half acres, constituting the "Point," at the junction of the rivers, was purchased by Mr. H. C. Frick from Mrs. Schenley. Mr. Frick also purchased from Mrs. Schenley the reversionary right of the Block House property, should the Daughters fail to maintain it because of its historic associations. The consideration in these two deeds was two million and ten dollars. But the spirit of patriotism among the good women of Pittsburg will have to wane materially if the reversionary right is ever to be of any value to its owner. It is not supposed that this property belongs to Mr. Frick, but rather that he purchased it for the Pennsylvania Railroad Company, and for which he now holds it in trust. The deeds from Mrs. Schenley to Mr. Frick were recorded in October, 1902, and on October 13, 1902, an ordinance was introduced in Pittsburg councils by the Pennsylvania Railroad Corporation asking for the right of way from the Union Station to the "Point" property leased from the purchaser of the Schenley tract, by way of an elevated structure crossing streets and along the Allegheny River wharf, which was laid out by a special act of the Legislature in 1836, to be used for wharf purposes only, forever. Included in this ordinance was among others a provision for a change in the grade of Penn avenue between Third street and the "Point." A few months later a substitute ordinance was presented from which some of the most audacious provisions of the first bill were omitted; and while the proposed change of grade was not as great as in the original draft, either plan would have caused great damage to the "Block House" property. The committee of the Daughters, after many weeks of attention to the subject and attendance at many committee and council meetings, was enabled to have this and another paragraph stricken out. The amended ordinance was passed in March, 1904, and the Pennsylvania Railroad Corporation given franchises worth millions of dollars without compensation to the city.

Shortly after the streets were closed, as a result of the decision of the Supreme Court, viewers were appointed to assess the damages. They awarded the Daughters of the American Revolution the sum of one thousand dollars for closing Fort street, but nothing for the closing of Point alley. The reader will understand that while Fort street was open, the property of the Daugh-

ters had a fine frontage. When these streets were closed they had no access whatever to the Block House lot except by the ninety-foot strip of ground running from Penn avenue to the Block House lot. But on this strip was the brick house fronting on Penn avenue, the rental of which was applied to keeping up the property and keeping it open for the public. They were forced to tear down the brick house and use the 90 by 20-foot strip of ground as an entrance way to the Block House. Fort street when vacated was used at once by the reputed owner of the nine and one half acres at the Point. The Daughters brought suit against the city in July, 1903, asking for fifty thousand dollars for the injury done them by the closing of Fort street and Point alley. Bonds were given, Mrs. Schenley's obligations *all* assumed by Mr. Frick for the Pennsylvania Railroad Company, to indemnify the city against any damage they should sustain by closing the street and alley. The damage case was heard in October, 1904, and the Daughters stood up nobly for their rights. Several of their number gave valuable testimony concerning the damages they sustained. The case lasted two days. The jury rendered a verdict in favor of the Daughters and awarded them the sum of $18,300, which was not generally thought to be an unreasonable verdict, and was hailed as a splendid victory for the Daughters. The city asked for a new trial based on the technicalities of the law. The court decided that if the Daughters would accept a smaller sum than the amount awarded by the jury, a new trial would not be granted. In order to avoid further litigation in the matter of damages for the closing of the street and alley, the Daughters agreed to accept the sum offered—$12,000—this sum being paid to their treasurer within thirty days.

The daughters were congratulated on all hands. To meet a powerful corporation in battle and after successive defeats to finally overthrow them, demonstrated to the people that they were indeed worthy daughters of those whom defeat did not discourage, but who finally overpowered and hurled back across the Atlantic the mighty army of Great Britain. They preserved the Block House, one of the most important historical monuments in the United States, and made the corporation pay for the damages done.

When the brick house on Penn avenue was torn down it left the Daughters not only without the rental income, but without a place in which the custodian could lodge. This compelled them to erect a small brick house farther back on the 20 by 90-foot strip of ground in which to house the custodian. This with refencing, water and sewer connections, cost them about $5,000.

The ground upon which the Block House stands was purchased from the Penns by Isaac Craig and Stephen Bayard in 1784, and after several conveyances, was sold to General James O'Hara on September 4, 1805. On the death of General O'Hara in 1819, it passed by will to his daughter, Mary, who in 1821 married William Croghan. She died in 1827 leaving an infant daughter, Mary Elizabeth. In 1842 Mary Elizabeth married Edward W. H. Schenley, a captain in the English army. It remained in her name during all these years

and until she finally conveyed it to the Daughters of the American Revolution of Allegheny County.

While the property was owned by Craig and Bayard, a large brick dwelling house was built on the ground and connected with the Block House, for it was then not supposed to have any historic value. From the time the new house was built until April 1, 1894, both houses were used as a dwelling house, and were leased to various tenants, Mr. Turnbull, of Turnbull & Marmie, the early iron masters and distillers of Pittsburg, and Major Isaac Craig both having been tenants prior to 1785. The Block House was badly cared for, though strange to say, the gallery and the stairway within were preserved. The walls had been built 130 years before the Block House came into possession of the "Daughters." Time and decay had done their work and the new owners found the old monument rapidly crumbling. Had it been neglected many years longer without attention, its walls would have again mingled with the dust. The first work of the Daughters was to clear away the old tenements which were built near and connected with it. By the use of cement between the bricks, where the original mortar had disintegrated, the walls were made as solid and as strong as ever.

But the result of this long Block House contest is only a part of what the Daughters of the American Revolution of Pittsburg have accomplished. During the Legislative session of 1903 two "bills" were introduced, one an act to exempt historic sites and buildings preserved within the state from the power of "eminent domain," the other an act permitting railroads to take any kind of property they desired for any corporate purpose. On account of the two "bills" the presence of the chairman of the committee of the Daughters was necessary in Harrisburg during the greater portion of six weeks, also for two special visits for the consideration of the "bills" with others. At the end of six weeks the representitives of the Pennsylvania railroad agreed to combine the two "bills," including the protective features of the Daughters' "bill" in their "bill" asking for greater powers than they already possessed. The governor in accordance with his expressed opinion that the law of eminent domain should be curtailed rather than increased, vetoed the "bill" after it had passed both houses.

In the Legislative session of 1907 the same bill was introduced, exempting certain historic buildings or sites from the rights of eminent domain, and again the presence of the chairman of the Board of Directors of the Daughters was necessary for weeks in Harrisburg. This time the work was attended with success as will be seen by a reference to the bill which became a law on May 10, 1907. The long contests to save the Block House and to secure for the Daughters the damages to which they were justly entitled, together with the legislative work was participated in by many of them, but there is one who stands out prominently above all others, who took the lead in all these matters and carried them to a final success. We are glad to do honor to her because of the great work she accomplished, and to name

her as Mrs. Samuel A. Ammon. She is a daughter of the late William M. Darlington, the well known historian and lawyer, and through her mother, Mrs. Mary Carson Darlington, a granddaughter of Richard Butler O'Hara, and a great-granddaughter of General James O'Hara of the Revolution.

The Pittsburg Chapter of the Daughters of the American Revolution is now one of the largest chapters in the United States, there being but two larger, viz.: The Chicago and the Buffalo chapters. Almost from the day of its organization it has been engaged in contest, but a part of which we have above outlined. It has not folded its hands and sat idly by, when the ruthless hand of the iconoclast was raised against a historic monument of the city. Its members have prided themselves upon what they did to preserve the sacred memories of the Revolutionary soldier rather than on the fact that they were descended from him. It was they who placed the bronze tablet on the court house, marking the scene of the defeat of the English army under Col. James Grant in 1758.

We would but illy do justice to the chapter if we did not give a measure of praise to its founder, first regent, and also the first state regent of Pennsylvania, Mrs. Julia K. Hogg, wife of Mr. Nathaniel B. Hogg, now of New Rochelle, New York. No one can overestimate or even appreciate the great work she did, not only for the Pittsburg chapter but for the organization throughout the county when it was in its infancy. Her fine ability and charming personality made her a power on the National Board of which she was an honored member for years. Her maiden name was Hall, and she was descended from John Harris, who founded Harrisburg in the early half of the eighteenth century. She was the author of the famous lineal descent amendment, and had it incorporated in the organic law of the order, but only after a struggle which lasted for several years. This proved a great benefit to the society by placing it on a solid foundation, and preventing collateral descendants from becoming members. It is but injustice to say that the great success of the Pittsburg chapter is largely due to her wise counsel and able management when it was founded and during its first few years.

Pennsylvania Daughters honored her by raising a fund sufficient to offer a prize of fifty dollars each year for the best essay on Pennsylvania history, to be competed for by the senior class of girls' colleges in her own state.

They give prizes to the public schools for essays on historical subjects. Boys and girls can compete. They also present flags to them and teach them to salute it. A large flag is presented to a school and small flags given to each pupil. A foreigner is usually selected to make the address. On one occasion a Polish boy made the address. In this manner the foreigners are taught to honor our flag while they are young and while they are accepting a free education in our free land.

The Advisory Committee—Miss M. W. Denny, Mrs. James B. Oliver, Mrs. Cyrus Clarke, Jr., Mrs. William Cassidy, Mrs. James R. Mellon, Mrs. Wm. Thaw, Jr., Mrs. ———— Marsh, Miss Katie C. McKnight, Miss Julia

M. Harding, Miss Beulah E. Kennard, Mrs. Samuel A. Ammon, chairman.

The Pittsburg Chapter, belonging as it does to the National Society with its headquarters in Washington, District of Columbia, also a state conference, is annually called upon to contribute to the building of Memorial Continental Hall, and all state enterprises, such as contributing a bronze, life size medalion of William Penn, which was placed on the battleship Pennsylvania; a state prize, the Julia K. Hogg testimonial prize of fifty dollars for best essay on an historical subject—to senior classes of girls' schools and colleges; a tribute to the Pittsburg Chapter's first state regent for her valuable services to the National Society. There are constantly worthy objects presented for consideration. When the war with Spain was declared, the first nurse accepted was a Miss Lyon, a member of the Pittsburg Chapter. One can judge of the interest taken by every Daughter in times of war, because they always assist in their country's cause. Miss Matilda Wilkins Denny has been the faithful president of the Allegheny County Daughters of the American Revolution and guardian of the Block House ever since the Society was incorporated. She gave to it her time, energy and constant care through the three years of anxiety over litigations with "Warehouse Syndicate," resigning only a few months since on account of ill health. Mrs. Ammon is president now.

Following are the names of the Board of Directors who were in charge of the Block House during the three years of vigilance, litigation, etc., with the "Warehouse Syndicate"—Pennsylvania Railroad Company: Miss M. W. Denny, president, Miss Mary E. McCandless, Mrs. Jarvis Adams, Mrs. Cyrus Clark, Mrs. James B. Oliver, Mrs. Albert Horne, Mrs. Wm. Thaw, Jr., Miss Kate McKnight, Mrs. Samuel A. Ammon.

On October 4, 1905, the Block House Lodge was formally opened. The house stands about forty feet back from Penn avenue, occupying fifteen feet of the width of the lot twenty feet wide by ninety feet deep, extending to Penn avenue, and contains four rooms and a finished cellar, cemented and equipped with laundry appliances. The front room is furnished for the use of the Board of Directors, and for a reception room. The other three rooms and bath room were completely furnished by the "Daughters" for the use of the custodian.

The cost of erecting and furnishing the house, re-erecting the iron fence, re-grading the grounds and laying new concrete walks amounted to about six thousand dollars. The six thousand dollars remaining from the sum awarded in damages is invested, the income therefrom representing the amount lost annually by the removal of the dwelling house which occupied the twenty feet fronting on Penn avenue, for which rent had been received. In September, 1906, the O'Hara avenue case (Equity) was tried before Judge J. M. Kennedy, who on October 19, 1906, decided the case against the Daughters, stating in his opinion filed that as all communications made prior to the deed are merged in the deed, the evidence anti-dating the deed could not be ad-

mitted. Exceptions were filed to this decree and were argued in the fall term, 1907. In the damage cases and the O'Hara avenue case the Daughters were represented by their attorneys, Messrs. Samuel A. Ammon, Edward B. Scull and A. M. Imbrie, the Pennsylvania Railroad Company, defendant in the latter case, by Messrs. Paterson, Sterrett and Acheson.

CHAPTER XXXVII.

The Pittsburg Riots.

A serious and disgraceful disturbance in Pittsburg has long been known as the Pittsburg riots, or the riots of 1877. It is chiefly remembered because of the great value of the property destroyed and the futile attempts of the local authorities to control those engaged in it. The property destroyed has rarely ever been valued at less than $3,000,000.00, nearly all of which went up in smoke, on Sunday, July 22, 1877. The trouble grew out of an attempt made by the Pennsylvania Railroad Company to reduce its expenses by a consolidation of freight trains. The country was then passing through the financial panic of 1873 and the railroad company doubtless had its own reason for wishing to curtail expenses. There was a general unrest in 1877 which prevailed in many large railroad centers in the United States. In Washington, Baltimore, Philadelphia, New York and Cincinnati it was fully as prevalent as in Pittsburg, but it culminated in the latter city and spent its force in the riot, much to the regret of the people of Allegheny county. This dissatisfaction was first shown in Baltimore on July 16. On that day about forty men, who were employes of the Baltimore & Ohio railroad, without notice to the company abandoned their trains and joined a large number of firemen and brakemen who had struck some days previous. The managers of the road had no trouble in securing others to take their places. But the strikers had grown in numbers and they refused to allow trains to go west from Baltimore. The trouble spread rapidly and the governor of West Virginia called on the president for assistance from the national government. The president issued orders to the rioters to disperse, and sent two hundred and fifty armed soldiers to enforce his orders. All the great railroads of Pennsylvania, New York and the northwest roads, which in the aggregate employed over eighty thousand men, were effected by it. The primary dispute was between the road and its employees, and the chief grievance on the part of the latter was that the management proposed to put two freight trains into one. This in the parlance of the day was called a double-ender. A freight train of that time consisted of one engine and about twenty freight cars, and was operated by an engineer, a fireman, a conductor and two brakemen. The purpose of the man-

agement of the road was to put forty freight cars into one train with an engine at each end of the train, and to handle these forty cars with one conductor and two brakemen, thus they would save the wages paid to three men on each of the trains. The management had also announced a ten per cent. reduction in the wages of its employees. It was but a trial on the part of the company and would perhaps have been but a temporary arrangement. It was a trivial matter at best, and there was no reason why they should not retrench expenses in this way if they saw fit. It resulted in the end in anything but a retrenching of expenses and has not been considered a brilliant conception on the part of the company. To this change in the moving of freight trains the employees objected most strenously, mainly because it reduced their members by nearly one-half and would probably throw that proportion out of employment. They tried to prove to the management that the change was impracticable and would not prove a means of economy or retrenchment in the end. An order to make a trial was issued and the company perhaps never dreamed of the outbreak the experiment would engender. At all events they were confident of victory. But the freight employees were organized at once, if indeed the organization had not existed before this. They accordingly passed a resolution binding upon all of them to resist the measure if persisted in by the company. July 19, 1877, came on Thursday, and this was the day named by the company on which the new plan should go into effect. Several double-enders were made up but there were neither brakemen nor conductors to be found who would go out to take charge of them. The employees had struck and their leaders had placed themselves through the yards and along the tracks to see that no conductor or brakeman should venture to take out a "double-ender." The first result was that the freight business of the road came to a standstill. It was undoubtedly the right of the employees to refuse to work if they thought best, but they had no right to prevent others who desired employment from working in their places. This they did, and more, for there ensued all along the line and particularly in the Pittsburg yards, a reckless destruction of railroad property. When the trouble began to grow serious an effort was made by the city authorities to put a stop to what then promised to grow into a riot, if indeed it was not already so. The mayor of Pittsburg, Charles McCathy, was willing and anxious to check the growing disturbance, but his force was not constituted for such an emergency and he had no power to increase it. The county authorities, though called on at once, were equally impotent. The sheriff, who, as at all times, had power to call out a *possc comitatus,* tried earnestly to enforce his authority, but most of those he could have called on were at least in sympathy with the strikers if not boldly assisting them. As a result neither the city nor the county was able to command a sufficient force to check the difficulty. Indeed every movement added fury to the mob, and nothing short of a good sized army could have overpowered them. The average American citizen dislikes very much, under any circumstance, to serve as a special policeman, and in this case with

many of his friends, neighbors and acquaintances in the opposition, and himself in deep sympathy with them, the city and county authorities were entirely powerless to command him. The result was that the company on Friday, July 20, called on the governor of the commonwealth for troops to protect their property. These were accordingly ordered out and undoubtedly seemed necessary. They appeared first on Saturday, July 21. The strikers, as the employees were called, were posted along the tracks, mostly between the Union Station at Pittsburg and the stock yards, which were then at East Liberty, five miles east, with their greatest force at Torrence at the outer depot near Twenty-third street and at East Liberty. A railroad official, when attempting to turn a switch, was assaulted by a striker, and when several policemen attempted to arrest him they were stoned by the mob. Threats were made that they would release the prisoner by force but fortunately this was not attempted. The troops called out were the legal military organization of the state, namely the Fourteenth and Eighteenth Regiments of the National Guard of Pennsylvania. To these were added the Jefferson Cavalry and the organization known then as Hutchinson's Battery. The artillery and battery were stationed at the heart of the most threatened districts, and the infantry were placed mainly on the hillside above Twenty-eighth street.

The average citizen of Pittsburg sided with the employees and against the railroad company. There were, of course, exceptions to this, but they were few and the same feeling prevailed in Western Pennsylvania generally, especially among those who lived near the railroad or near its principal stations. Pittsburg had an old standing grudge against the railroad company because of a discrimination in freight rates against the city. The company, they said, had treated Pittsburg as a way station on its route to the West, and not as a great manufacturing center at the terminus of a railroad. Freight rates to Philadelphia, New York, Baltimore and Boston were actually lower from Cincinnati and other points in the West than they were from Pittsburg. It was furthermore cheaper to ship grain and other western products from Chicago to Boston, New York and Philadelphia, than it was to ship them from the same place to Pittsburg. This discrimination was moreover so great that manufacturers who were shipping goods that were not at once demanded in the eastern cities, frequently shipped them first to Cincinnati and other western points, and from there had them reshipped to Boston or elsewhere in the East, and this, it was claimed, resulted in an important saving in freight to the Pittsburg manufacturer. It was due perhaps to a short-sighted policy on the part of the railroad managers, in part to the fact that there were no competing lines between Pittsburg and the East, and in part to the fact that the question of mutual interests between the shippers and the common carrier was not as well understood then as it is now. This discrimination could not long exist under our more stringent laws, namely the Interstate Commerce Law, and kindred acts, which had not then been placed upon

the statute books. The discrimination against Pittsburg was not probably a vicious one. There was an idea among railroad men that the business of the city must necessarily be confined exclusively to manufacturing. J. Edgar Thomson, an early president of the Pennsylvania Railroad Company, and a man of great business foresight, it is said, repeatedly avowed in 1858 and 1859, "that Pittsburg was no place for business," that it was a good market for iron, nails, glass, etc., but was too smoky and sooty a place for dry goods and other wares to find a wholesale demand. He and his successors for a number of years treated Pittsburg accordingly, and it was this that made the average merchant and business man hostile to the railroad company. Nearly every merchant had some private grievance against the Pennsylvania Railroad Company. Many of them published their quarrels with the company in the newspapers, and thus the complaint became general, and the average Pittsburger, whether directly interested or not, took sides against the railroad. For this reason and perhaps for others the citizens of Pittsburg were largely on the side of the law-breaking employees, for unreasonable as the new order may have seemed to the brakemen, there was no defiance of law whatever shown on the part of the railroad company.

The troops, citizens of Pittsburg, were not sufficient to preserve order. When drawn in line they were moreover confronted by their friends and relatives who were with the opposition. Accordingly troops from the East were asked for and sent to Pittsburg on Friday night. On Saturday afternoon about two o'clock, two brigades of the Philadelphia troops, which included the Weccaco Legion, the Washington Grays and the Keystone Battery, with two Gatling guns, reached Pittsburg and were posted on the Twenty-eighth street crossing, near the round house and at the outer depot. Everything indicated that the company intended to send out "double-enders" at once. Half the city seemed to have turned out as idle spectators to watch the movements, and particularly did the crowd increase when the news of the arrival of the eastern troops was spread throughout the cities. The crowd was so immense that the first duty of the newly arrived troops was to open up the track by forcing the people back. But the spectators were sullen and stubbornly refused to give up the position they had selected. In the endeavor of the troops to force them back, some malicious persons on the hill side above threw stones among the troops. The troops, by order, it is said, of General Brinton or General Pearson, responded at once by a scattering fire from many of their guns, and this resulted in the killing and wounding of a number of citizens and spectators, and so reckless was the shooting that some of the Pittsburg troops and indeed three children were among the killed. This only added to the fury of the people who were already unreasonably hostile against the railroad company and against the soldiers who were trying to preserve order. The strikers and their friends, as night came on, became little less than a powerful mob, which took possession of the city. All the loafers, idlers, thieves and law breakers generally in the community, saw before them a rich

harvest and a night of depredation followed. There were about two thousand of loaded cars on the tracks, some from the West laden with goods such as grain, flour and provisions of all sorts, with cattle and horses for the eastern market, and some from the East laden with shoes, hats, dry goods and nearly every kind of household material for the western market. There were also many cars bearing tanks filled with oil, for its transportation by pipe-line had not yet been introduced. To set fire to these and to begin the work of plundering the cars was the work of but a few minutes. The burning of all this property, the cars, the oil tanks and the large buildings, made a lurid flame which pierced the sky and lighted the city for miles in each direction. Men, women and children came to see the fire, apparently never thinking of the danger they were in because of the reckless firing on the part of both the mob and the soldiers. The hill above the burning depot, the roofs of high buildings and the tower on the city hall were all filled with spectators as though a magnificent parade was taking place in the streets below. In Allegheny the sight-seers collected on Observatory hill and even from that distance the scene though terrible was magnificent in its awful granduer. The rioters found the greatest difficulty in firing the round-house and the Union Depot, both of which were substantial brick buildings. Cars of flame were pushed under the sheds of the station, but they did not have the effect the mob desired. The rioters then discovered that attached to the Union Depot was a two-story frame building used as a depot master's office. This they broke open, and after strewing the floors with papers found there and with a liberal supply of oil, it was soon a mass of flames which were readily carried to the main building. All day on Sunday while the clouds of smoke from the burning cars hung over the city, the streets were alive with plunderers heavily laden down with hams, sacks of flour, boots, shoes, dry goods and almost everything they could carry. In fact the people were mad with excitement and it was impossible to stop this high-handed proceeding. Soon after the unfortunate firing the Philadelphia troops were placed in possession of the round-house of the company at Twenty-seventh street. Their warlike spirit was also raised by this time, and they at once prepared to protect this against all opponents, or against the mob, as it was called. Gangs of men, many of whom were already criminals, visited other parts of the city, broke open armories and broke into gun shops and stores where guns and revolvers were kept and proceded to arm themselves. One or two heavy guns were taken from the armory of Hutchinson's Battery in Allegheny, and they were at once put in position on Twenty-seventh street with the intention of training them on the round-house, which was filled with Philadelphia troops. They actually fired the cannon many times and a hole was made in its walls, but those in the round-house fired many shots from the windows with deadly results, and thus kept the besiegers from effectually cannonading them. In the meantime the lawless element, infuriated to a limit beyond all reason, increased the wanton destruction at every possible point, confining themselves, of course, to the rail-

road property. Train after train of freight cars, many of them richly laden, were set on fire and consumed. The mob had another object beyond the destruction of the cars and freight. They hoped in this way to set fire to the round-house. There were tracks on both sides of it and all were full of cars, and those within the beseiged round-house garrison averted this danger only by a gallant fight. Their chief defence was to put obstructions on the track to prevent the burning cars from reaching the house. Finally the strikers found a car of coke on the Allegheny Valley road. They soon had this in position, and after thoroughly saturating the coke with oil, they set fire to it and pushed it with all its glaring mass of flames against the round-house. The troops remained in the round-house and were thus engaged all night, and by Sunday morning, when the mob had for some unknown reason left the vicinity, they evacuated their fortress and marched up Twenty-fifth street to Penn avenue and then to the United states arsenal. But the commandant of the arsenal was supported by only ten men who could not hold it if the mob were to attack it, and he refused to admit them. He opened the hospital, however, for the wounded. They then crossed the Allegheny river at Sharpsburg, the mob following them all the way. On their way out Butler street they were severely attacked by the mob, but only when compelled to do so did they return the fire. Several soldiers were killed and a large number wounded badly, but the fire they returned had a still more deadly result. After crossing the Allegheny the troops scattered, and the mob did not pursue them further.

The general work of destroying the company's property by fire continued all day on Sunday, and the torch of the incendiary was only stayed when the railroad property in the city and all freight cars within reach was consumed. The mayor of the city by this time called a meeting which took measures to stop the spread of the riot through the city. The destruction of property was in this way confined to the railroad districts between the Union Station and the outer depot. Other railroad property in the city and in Allegheny, but for this movement on the part of the citizens, would have met with the same fate. This movement, headed by the mayor and gotten up by the better class of citizens, rapidly effected a thorough organization to resist further incendiaryism and the organization was in a high degree successful. Fire companies had been called out but were powerless to save railroad property, for the mob was determined that it should be destroyed. Companies on their way to the burning buildings of the railroad company were stopped by an armed force and turned back with threats to cut their hose and upset their apparatus if they persisted in moving forward. A cannon was placed near the burning buildings to prevent any one from putting out the fires.

Hundreds of men, who seemed to have lost their reason, were almost systematically engaged in breaking open cars and distributing their contents. While this was going on others were firing them so that none could escape destruction. There were actually thousands of men, women and children engaged in carrying away the goods thus thrown into the streets. Wagons

which by chance were nearby were taken at once by the thieves who filled them with goods and drove home. All kinds of goods were taken, and in this a very amusing feature of the riots presented itself to the spectator, for most of the goods taken would prove utterly useless to those who took them.

The reader must not understand that this mob was made up of original strikers. There was a vast difference between them. The strikers never dreamed that the work of destruction would be carried so far. The meeting on Sunday was attended by some of the railroad employees who had perhaps assisted in the defiance of the law in the early stages of the disturbance. The committee of public safety took charge of the affairs of the cities when the police, the sheriff and the troops all had ignominiously failed. The committee appointed to represent the people were: William G. Johnston, chairman; John Moorhead, Paul Hacke, Ralph Bagaley, George Wilson, J. J. Gillespie, G. Schleiter, J. G. Weldon, George H. Thurston, James J. Donnell, James B. Haines, George A. Kelly, F. H. Eaton, J. E. Swartz, Joseph Horne, William T. Dunn, R. G. Jones, Dr. McIntosh, Frank Bisel, Jno. R. McCune, Jno. M. Davis, John B. Jackson, R. C. Gray, Alexander Bradley and Samuel Harper. A committee was appointed to prepare an address to the people of the cities which probably assisted in quieting the disturbance. A proclamation was also issued by the governor, who came in person to the city to address the rioters. Lest the outbreak might be revived he sent over two thousand troops to Pittsburg, and for some days they were encamped near East Liberty.

Twenty-five persons in all were killed and many more were wounded, some of them being mere spectators. There were, as nearly as could be determined, 1,383 freight cars, 104 locomotives and 66 passenger coaches destroyed. The Union Depot and the grain elevator which stood near it, and the Union Hotel, were the principal buildings of the company which were burned. The loss to the Pennsylvania Railroad Company was something over $2,300,000, and was settled by the commissioners at $1,600,000, while the private loss of various kinds paid by the county amounted to $1,172,349. At the time of the Native American riots in Philadelphia, commonly called the Philadelphia riots, the legislature passed an act making Philadelphia county responsible for all property destroyed within its limits during a riot, and by a later act this same law was extended and made to apply to Allegheny county. The law governing these riots was not a general one, therefore, and had the destruction taken place in any county except in Philadelphia or Allegheny those who suffered would have had no legal recourse for damages. Allegheny county was, therefore, by the rulings of this law, compelled to pay for the damage done by the rioters and did so without litigation, save what they deemed necessary to fix the legal responsibility on the county. It cost the county, including interest and all, about $3,000,000.

CHAPTER XXXVIII.

The Spanish-American War.

In all the wars in which the United States has been engaged, Pittsburg and Allegheny county performed their part nobly and were not found wanting in the spirit of true patriotism, when the war between this country and Spain came in the spring of 1898. Soon after war had been declared by congress, Pittsburg was alive as to what might be expected of it in way of supplying troops. Of the three batteries of artillery furnished by Pennsylvania, Pittsburg sent out one— Battery "B." It also sent out parts of the infantry regiments Fourteen and Eighteen. It was not the fault of these soldiers that they did not see service outside of the United States, but the artillery was sent to Porto Rico. The Fourteenth Regiment of National Guard was composed of eight companies—A, B, E, F and G, located in Pittsburg, while the others were all in Allegheny county; they were Company C from Oakdale; I from Elizabeth; and K from Carnegie. By order of the government, this regiment left Pittsburg on the night of April 27, 1898, for Mount Gretna, Pennsylvania where they were reviewed and where the men were given an opportunity to enlist in the United States service for the Spanish-American war. The various companies were recruited to seventy-eight men and officers. On May 12, the regiment was mustered into United States service, as the "Fourteenth Regiment of Pennsylvania Volunteers." The same day by order of the war department, it was sent to Fort Mott, New Jersey. Companies E and F were detached, and under command of Lieutenant-Colonel Graham, were stationed at Fort Delaware, Delaware, and later they were recruited to one hundred men and three officers to each company. On July 26, Companies I and K, stationed at Fort Mott, changed stations with Companies E and F at Fort Delaware, where they remained until September 3, 1898. They were then removed to Camp Meade, at Middletown, Pennsylvania, and were soon assigned to the Second Brigade, First Division, Second Army Corps. While in camp at Middletown, the regiment participated in the Peace Jubilee, held at Philadelphia, October 27, 1898. In November they proceeded to Summerville, South Carolina, arriving there on the 16th of that month. Colonel William J. Glenn was placed in command of the brigade and retained command until relieved

by Brigadier-General Waters. The regiment remained at Summerville, until mustered out of the service there, February 28, 1899.

The other infantry regiment from Pittsburg was the "Eighteenth Regiment of Pennsylvania Volunteers," made up of eight companies, from Pittsburg, which also left on April 27, for Mount Gretna, arriving the next day with thirty-four officers and four hundred and eighty-four men. On May 3, they were officially reviewed by the governor and given an opportunity to became volunteers in the United States service, and when the question was put to them, every man answered in the affirmative. Upon physical examination, one officer and thirty men were rejected. On May 9, one hundred and fifty recruits were sent from Pittsburg to bring the strength of each company to the required standard of seventy-five men. On May 11, 1898, Companies B, C, F and G, were mustered into service, followed by Company H, on May 12, and Company E on the 13th together with the field and staff officers. The regiment remained at Mount Gretna until July 4, when Company F (Captain S. W. Jeffries) was detailed for duty at Alliance, Ohio, to guard the Morgan Iron Works; they remained there until August 24, and then joined the regiment at Camp Meade. On June 7, orders came for a part of the regiment to move to Battery Point, Delaware Bay. June 17, there were seventy-one recruits added. June 23, Companies D, E and H, commanded by Major John C. Kay, proceeded to Fort Brady, Michigan. Subsequently Company D was detached from the battalion and detailed for duty at Fort Wayne, Detroit, Michigan, guarding the Sault Ste Marie canal until August 23, the same year, when they too joined their regiment at Camp Meade. Under telegraphic orders, from the secretary of war, dated September 2, 1898, the whole regiment proceeded to Pittsburg and on the 11th prepared to muster out of service. A furlough was granted the regiment for thirty days, and this was later extended ten days and the regiment was finally mustered out at Pittsburg, October 27, 1898, having seen no actual field service as fighting soldiers.

Light Battery B, Volunteer Artillery of Pennsylvania, went from Pittsburg, it being one of the three from the state, the others being A and C. The same date on which the infantry companies of the National Guard left Pittsburg for Mount Gretna, this battery left for the purpose of tendering their services to the United States. They reported six officers and sixty-seven men, with forty-nine more men taken as recruits. Four officers and seventy-six men were all that were needed and such were mustered into the United States service, May 18, 1898, and went at once to Camp Thompson, Chickamauga, Georgia, arriving May 20. Orders were there received to increase the number of men to one hundred and seventy-six, which was done by the 26th of that month. On the 16th of July the battery was ordered to report at Newport News, where it embarked on the transport "Roumania" for Porto Rico, July 27. She ran aground off port of Guanica and the battery disembarked, remaining twelve hours and receiving orders to report to General Miles, at Ponce, from which place they were sent to Arroyo, where they ar-

rived August 4. A detail of this battery built a wharf for unloading purposes and a bridge over a creek on the road to Guayama. This was eighty-five feet long and was well constructed. The battery occupied the city of Guayama until August 12, and on the 13th passed through the city and over the mountains towards El Caney, arriving at a point near the summit of the mountain. Here the enemy was entrenched. Major-General Brooke directed the battery to be put in action front in Echelon. The guns were loaded and the battery awaited the command to open the engagement, which was momentarily looked for, when news arrived that the Peace Protocol had been signed and hostilities should cease. The battery remained in the mountains several days, then returned to Guayama and went into camp, remaining until August 23, when it was ordered to Ponce from which place it took the transport "Concho," September 8, and sailed for New York, arriving there September 15, after a rough voyage. They were there met and welcomed by the governor of Pennsylvania. The battery arrived in Pittsburg on the evening of September 18, and was enthusiastically received by the citizens. Each man was furloughed for sixty days and on November 17, 1898, the battery was mustered out of the United States service as on the date of November 27. The men who composed this battery all returned without the loss of one, or any serious accidents. In the Fourteenth Infantry, two died of disease and one was killed by accident, while in the Eighteenth Infantry regiment one man died of disease.

The interest of Pittsburg and Western Pennsylvania generally, centered largely in that part of the war which was carried on in the Philippine Islands, under the command of Brig.-Gen. Francis V. Greene, though the city had no organization in that department of the army. Many of the troops sent there, notably the Tenth Regiment, were from Western Pennsylvania, and were, moreover, collected and began their westward journey from Pittsburg on May 19, 1898. Pittsburg renewed her old-time Civil war spirit in entertaining the troops as they passed through the city. They were surrounded by thousands of citizens who had assembled to make them presents, to bid them good-bye and give them a last word of good cheer before they left on their long journey to the Orient. With these troops as commander of the Tenth Regiment, was Colonel A. L. Hawkins, of Washington, Pennsylvania, who was well known in Pittsburg, and who had greatly endeared himself to the people by almost a lifetime of military service, first in the Civil war and latterly by his great efficiency in the National Guard of Pennsylvania. While serving his country in the Philippines Colonel Hawkins' health was undermined. When the war was over, he with his troops took passage on the "Senator" for San Francisco, sailing July 1. On July 18, while in mid-ocean, Colonel Hawkins died.

Pittsburg made great preparations to receive the Manila soldiers when the trains bearing them eastward from San Francisco should reach here. The city sent a committee all the way to San Francisco to confer with and extend an offer to the Tenth Regiment of a formal welcome upon their arrival. But

on August 1, the "Senator" reached San Francisco, and the sad news of the death of Colonel Hawkins was at once telegraphed to Pittsburg. This necessarily modified the splendor of the reception, which the city meant to extend to the soldiers. Nevertheless, they were most heartily welcomed when they reached Pittsburg. Three sections of a train brought the soldiers from the coast, bringing with them their dead commander. They were served with a breakfast in the morning before reaching Pittsburg, at New Brighton, the home of a company in one of the returning regiments. The reception given them in Pittsburg, was one long to be remembered by all who were present. Among others who came here to take part in the general welcome were William McKinley, then president of the United States, D. H. Hastings, governor of Pennsylvania, Generals Wesley Merritt and Francis V. Greene, and many other noted men from all parts of the country. They reached Pittsburg on August 28, 1899, after a service of sixteen months. Colonel Hawkins' remains were subsequently interred at his home in Washington, Pennsylvania. The closing exercises of the reception were held in Schenley Park, where it was estimated that ten thousand persons were present. On the way from Manila, the survivors of the regiment organized what was known as the "Memorial Association," and after the reception in the park, steps were at once taken to provide a fund for the erection of a memorial to the Tenth Pennsylvania Regiment, and a monument to Colonel Hawkins. The state legislature afterwards appropriated about twenty thousand dollars, and by other means (including the amount raised by the efforts of the city council of Pittsburg), a fund of twenty-five thousand dollars was secured for the purpose named. A memorial structure was built in Schenley Park, Pittsburg, in one of its many beautiful spots, and it is indeed a magnificent memorial. It consists of a life-size bronze military statue of Colonel Alexander Leroy Hawkins, backed by a wall of polished stone, semi-circular in shape, on which appear oblong tablets, bearing the companies letters: Company A, from Monongahela; I, from Greensburg; G, from Uniontown; H, from Washington; E, from Mt. Pleasant; K, from Waynesburg; D, from Connellsville; and B, from New Brighton, which companies composed the Tenth Regiment. The back wall is tapered off by a stone parapet. The base and floor are entirely of marble. Directly in front of the figure, is a large brass tablet, about six by ten feet, which is inserted flush with the floor, and upon which are the names of the fallen heroes of the regiment. On the base, supporting the statue of Colonel Hawkins, is a detailed account of his military career. The designer and sculptor was Richard Hamilton Couper, of New York City, who was present at the unveiling, which occurred June 12, 1904. Over six thousand veterans and guardsmen from Pennsylvania were present. The governor of the state handed it over to the care and keeping of the city of Pittsburg, standing on the same spot where almost five years before, stood President William McKinley, when he reviewed the regiment upon its return from the Philippines. At the unveiling several eloquent speeches were made, and over twenty thousand people were present.

The adjutant general reminded the people that this was the first public soldiers' monument within the limits of the city of Pittsburg. He spoke in praise of those who had thus generously contributed, time and means for its erection. As the decades come and go, this memorial will be duly appreciated by the multitude who pass by it, in their daily meanderings through Schenley Park.

CHAPTER XXXIX.

Public Parks, Monuments, Etc., of Greater Pittsburg.

In a practical, philanthropic sense 1889 will be distinctively marked in the history of Pittsburg, for it was during that year that men halted in their race for riches and gave more than ordinary attention to the things of comfort, relaxation and ease. Prior to that date men rushed madly on in search of more millions, unmindful of pleasures and health-giving, life-prolonging recreations, so much needed by active business men. They seemed too much wrapped up in money-getting to even think of the debt they owed to themselves, and their less fortunate neighbors. Whenever the question of public improvement in way of out-of-city parks was brought up, they voted such measures down, but pressed on in search of more wealth. The common people had long plead for a quiet, pure-air breathing spot, away from the din and tumult of the industrial portion of Pittsburg, but their plea was refused. Really an innovation was brought about in all these matters through the generosity of Mrs. Mary Schenley, who gave from her vast estate three hundred acres of land, which now constitutes a part of Schenley Park. It was a gift royal, and with it was ushered in a new and better era for Pittsburg and her progressive people. From that date on they saw pleasure, not alone in gold and bonds and steel-plate, but in trees, rocks, flowers, birds and the general enjoyment of nature, with such cultivation as man could add to such things. Schenley Park has been added to until it now contains four hundred and twenty-two acres. It was formally opened on July 4, 1890. Hon. R. B. Carnahan should receive a just meed of praise for his aid in securing the Schenley Park land donation, as well as Mr. Bigelow, the director, both of whom were important factors in presenting the matter to Mrs. Schenley at her home in England.

Schenley park is made up of almost every quality needed to give enjoyment to the lover of out-door life. Here one finds the clear miniature lakes, with row boats, many miles of bridle and foot paths, with more miles of paving and macadamized boulevards which teem with driving horses and automobiles, both by day and by night. It contains the rocky, steep hillside, the deep valley, sparkling brook and heavy forest scenes. In various pleasant

spots within its borders may be found grounds suitable, and which for years have been devoted to picnics and reunions. Here are scores of steel swings, settees, drinking fountains, pools, flower beds and myriads of singing birds. It is provided with numerous summer houses and waiting rooms, while anyone has free access to the driving park, which is located on one of the highest eminences overlooking the city. It is one of the best race tracks of the state, and annual races are held there. From the infant babe up to the aged and tottering, this park affords a comforting and healthful resort during the heated summer term.

Here assemble great public gatherings including political and religious meetings. A music pavilion was erected at a cost of $7,000, which is upon a six acre plot of level ground not far distant from the picturesque scenes of Panther Hollow. This is seventy-three feet long by thirty-two feet wide, and is forty-five feet high, and is covered with sheet copper. Beneath the music stand are lavatories and other rooms for the use of singers and speakers. To the forefront of this immense stand are seats sufficient in number to accommodate fully six thousand people, and which are not unfrequently too few in number, especially on evening concert occasions. This was opened up to the public July 4, 1898. This park is well lighted by electricity and gas, and is patroled by efficient policemen the year round.

The park has many bridges, stone, steel and rustic wooden ones. Among the more imposing structures is the Panther Hollow stone and steel bridge,

PANTHER HOLLOW BRIDGE

A view of one of the most charming spots in Schenley Park. The simple architecture of the well-designed Bridge structure harmonizes perfectly with the undisturbed natural grandeur of the surrounding scenery.

the approaches of which are guarded by four immense bronze panthers, designed by the sculptor Moretti, and are very striking figures. This bridge, which was erected in 1896 is six hundred feet long and sixty wide.

Another bridge over which all must pass who enter the park from the Forbes street entrance, is a stone and steel structure, the full width of the park boulevard. It was erected in 1896 at the cost of $25,000. This, with the Junction Hollow bridge of equal magnitude, was completed in 1907, and constitute the larger bridge structures, while many smaller ones are found here and there throughout the spacious park.

Wherever they are needed there are solid masonry retaining walls, which prevent the soil from washing and slipping. These also add beauty to the sloping hillsides, and in instances surround objects of interest, such as the colossal granite-bronze monument erected to the man who helped to make the park system what it is—Director Bigelow—as well as the coping at the foot of flag-staff hill, along which rocky wall is placed many comfortable seats.

Perhaps no one object within this park is more appreciated by those of esthetic natures, than the immense greenhouse known as Phipps Conservatory, which is located not far from the Carnegie Library. It cost $200,000 and contains 77,583 square feet of glass roofing. It was the gift of Henry Phipps, Jr., then a resident of Pittsburg. This building was commenced in August, 1891, and opened to the public one year from that date. The original building was 450 feet long, and was considered one of the most up-to-date and best constructed conservatories in the United States. To this has been added from time to time wings and additions, until it now covers a large area, and is filled with a wonderful display of all kinds of flowers and plants from every clime on the globe. The annual Easter exhibit is doted upon and visited by multiplied thousands, many of whom come a great distance to see the sweet blooming spring flowers and Easter floral offerings, not the least attractive being an abundance of lilies in all their purity. As early as 1895, this greenhouse was a popular resort, and the official reports show that during that year not less than 350,000 persons passed through the immense glass conservatory. The number of its visitors has increased each year. As an educational institution the public school instructors deem it invaluable for their advanced classes. It has made Pittsburg the botanical center of this section of the country.

Not far from the Carnegie Institute, and near the entrance to Schenley Park, stands the beautiful monument mentioned above to the memory of Edward M. Bigelow, who is still living (1907), and was erected for the service he had rendered the city in procuring an adequate system of public parks. This conspicuous memorial is reared up from within an eminent, artificially made mound, perfectly circular in form, four rods in diameter, and encased by a wall of solid masonry. The monument proper is of gray granite; this base of goodly size with its pedestal sustains the immense bronze statue of Mr. Bigelow. It was erected by public subscription by those who duly appreciated his service in securing the Schenley and Highland park properties. Its total cost was $12,746.15, as shown by the bills for its construction.

Up through East Liberty Valley, to the northeast from the city proper, lies Highland Park, on the hills overlooking the waters of the Allegheny river.

On one of the highest eminences within this park is located the great reservoir of the city water-works. Here is also found the home of the Zoological Gardens, established by the late Hon. Christopher L. Magee, and the beautiful monument erected to the sacred memory of Pittsburg's famous song-writer, Stephen C. Foster, which is spoken of elsewhere. This park, indeed a charming spot at any season of the year, was artistically planned with spacious winding driveways, over the hills, down through the valley, finally reaching Beechwood boulevard. This park, the most improved one within the twin cities (though not the largest in area), was opened for park purposes in 1893, the original containing forty-six acres. It was purchased from James McCully, and now contains three hundred and sixty-six acres. It has seven miles of macadam roads, four miles of walks and a fourth of a mile of bridle-path. At the entrance of this park are two pillars of highly artistic design. The grounds are beautifully laid out by expert landscape gardeners, an artificial lake called Lake Carnegie, is a leading feature. To the late Hon. Christopher L. Magee the city owes a debt of gratitude for the interest manifested and the amount expended in beautifying the city, including this park with the additional Zoological Garden, elsewhere mentioned at length. The grand entrance to this park cost $45,000.

The Zoological Gardens was a Christmas gift to the cities of the late Christopher L. Magee in 1895. The only stipulation made by the donor was that it be "Free to the People." Prior to that date the city had a small collection of animals in Schenley Park, where upon one of its beautiful sloping hillsides it maintained "Gusky," the elephant, and some smaller animals, which were much prized by visitors, especially the little folk, who divided their sweetmeats with the monkeys while attending picnics on the grounds. The history of the Highland Zoo may be briefly told by the following correspondence:

HON. B. MCKENNA, Mayor.

Dear sir: No more interesting or instructive institutions can be found in the great cities of the world than the Zoological Gardens. They appeal alike to the young and old, and to people in every walk of life. This fact has been strongly impressed upon the minds of all who have had the fortune to visit the Zoological Gardens of London, Antwerp, Amsterdam, New York, Philadelphia, Cincinnati and Chicago.

Having this in mind, I desire on behalf of my associates in the Fort Pitt Traction Company, and for myself, to tender through you, to the city of Pittsburg, suitable buildings for a Zoological Garden, to be erected in Highland Park, subject to the approval, as to location, etc., by the Directors of the Department of Public Works, the building to cost $100,000, and to be "free to the people."

On acceptance of this proposition by the city of Pittsburg, I would suggest that you, with E. M. Bigelow, W. H. Seif and H. S. A. Stewart, act as a committee to prepare plans, award contracts for and supervise the erection of the buildings proposed.

Very respectfully yours,
C. L. MAGEE.

Office of the Fort Pitt Traction Company,
Pittsburg, Pa., December 24, 1895.

Mayor's Office, Pittsburg, Pa., January 6, 1896.

Resolved: That the Mayor be and is hereby authorized to accept on behalf of the City of Pittsburg the tender made by Mr. C. L. Magee and his associates, to erect the buildings for a free Zoological Garden for this city.

In Councils, December 30, 1895, Rule suspended, read three times and finally passed.

Attest: W. C. GOERING,
Clerk of the Common Council.

Approved by Mayor B. McKenna.

J. L. Silsbee, of Chicago, was chosen architect and he submitted his plans the following May, but it was seen that it would cost more than the donation sanctioned, whereupon Mr. Magee generously made up the difference, which in the end amounted to $25,000. The buildings were finished November 13, 1897, since which time tens of thousands of both old and young have spent many pleasant hours viewing the great collection of rare animals purchased from time to time by the city. The building is constructed of yellow vitrified brick, and is forty, by seven hundred and fifty feet in dimension. To this has been added many lesser buildings, steel cages, out-door apartments, etc.

On the opening day but few animals had been collected, but by gifts from various persons, including the great hippopotamus from Hon. William Flinn, and two elephants from Mrs. Magee and Mrs. Gusky, and of birds, deer and smaller animals, a nucleus was soon formed from which has grown the present fine array of animal life.

As is shown by the monthly report of the chief keeper, Ernest Tretow, there were in the month of September, 1907, the following collection of animals:

Two hundred and seventy-nine birds of eighty-three species, 58 carniverous animals of five species, 36 small animals of six species, 66 herbiverous animals of twenty-one species, 41 reptiles of nine species, and 42 monkeys of sixteen species. This list aggregates 522 animals, of one hundred and forty separate species, collected from all parts of the globe, and include rare wild animals, such as tigers, lions, bears, wolves, a sea lion, foxes, wildcats, etc. There are also many birds of beautiful plumage and sweet song. In other departments may be seen the buffalo, deer, antelope, elk, zebra, hippopotamus, kangaroo and elephant. The Zoological Garden is being constantly added to and has been visited by many visitors from distant parts of the country. As an educational institution this collection of animals is greatly prized by the students of both the public and technical schools.

The smaller parks of Pittsburg reveal a beauty not excelled, if indeed equalled, by the larger ones. Friendship park in the Twentieth ward was donated to the city by Mrs. Matilda Goss McConnell. It is one hundred feet wide by nine hundred feet in length. It is a beautiful, level tract, which has been well improved and is an attractive spot for the people of that section.

McKinley Park, formerly known as Maple, is situated in the Thirty-eighth ward—old Beltzhoover borough. It was purchased by the city under the

act of May 7, 1898, and contains sixty-three acres. It is well improved, having a pavilion and music hall, with many attractive features. The scenery in the neighborhood is very romantic, being ever a feast to the eye. For beauty and attraction it is beginning to rival even Schenley Park.

In laying out Allegheny City the state reserved the "Diamond," or public square, at the intersection of Federal and Ohio streets, on which the city hall, Carnegie library and market-house stand. The original town site was one hundred lots in the form of a hollow square, while the outlets adjoining were designed for pasture purposes for the lot owners. As the years went by this became a question of much controversy, and every attempt to dispose of such outlots was met with bitter opposition by most of the lot owners, all of whom had to be consulted before an outlot could be disposed of for other than pasture purposes. After many years of litigation over this matter it was finally agreed by all hands interested to donate the outlots for public park purposes, which was done, and after which the borough raised money by an issue of bonds with which to make excellent improvements. This went on year after year, until the city now enjoys the privilege of having one of the finest park systems to be seen in all this portion of the state. The old commons has been converted into a charming resort for the citizens of the place. It is made up of one hundred of the outlots above mentioned, which forms a hollow square around the lots proper, on which now stands the heart of the city, thus giving a continuous park system, now beautified by monuments, fountains, drinking places, historic tablets, lagoons, crystal lakes provided with boats, etc. There are numerous floral spots here and there throughout the park, as well as many ornamental and shade trees, all of which appeal to refined and cultivated taste, and are duly appreciated by the stranger within the gates of the city.

A former resident of Allegheny, Henry Phipps, Jr., gave the present spacious greenhouse, which stands on the borders of the beautiful artificial lake, within the southern portion of the commons or park. This gift was made by Mr. Phipps in 1887, before his greater gift of the conservatory of flowers within Schenley Park, Pittsburg.

Riverview Park, Allegheny, was first devoted to parking purposes in 1894. About one hundred acres of this park was granted by the Penns and set apart by them as a "commons." By the legislative act of 1867 this was transferred to the city for park purposes. The balance of the land within Riverview Park was bought and added in separate tracts by private subscription money. On the highest eminence of this tract is seen the highest flagstaff found in this part of the country, and hard by is the Civil war soldiers' monument, elsewhere described. From this sightly elevation may be seen the united cities, presenting a grand panoramic view.

By comparing Pittsburg park acreage with the number of acres devoted to park purposes in the larger cities of the country, it will be seen that Greater Pittsburg compares favorably:

New York City, 5,000 acres; Philadelphia, 3,000 acres; Chicago, 3,000 acres; St. Louis, 2,200 acres; Boston, 2,000 acres; San Francisco, 1,200 acres; Washington, District of Columbia, 1,000 acres, while Greater Pittsburg has 1,269 acres. This proves the radical change of public opinion in Pittsburg since 1869, when the city voted against public park property by a majority of 4,500. The following summary is taken from official records in the autumn of 1907, and shows the improvements made in parks up to that date:

Total length of macadam roads, seventeen miles; graded roads, one mile; bridal paths, two and one-half miles; foot walks, twenty miles. Total acreage of Pittsburg parks is nine hundred and forty-five. These improvements are divided among the various parks as follows:

Schenley Park, located in wards Fourteen and Twenty-two, has ten miles of macadam, eight miles of walks and two miles of bridle paths. The total acreage of this park is four hundred and twenty-two.

Highland Park, containing three hundred and sixty-six acres, is situated in wards Eighteen and Nineteen, has seven miles of macadam roads, four miles of walks and one-fourth mile of bridle path.

Herron Hill Park, consisting of thirteen acres, locating in ward Thirteen, has one mile of good walk.

Central Park, of five acres, in ward Eleven, has one-half mile of walk.

Friendship Park contains two acres in ward Twenty, and has one-fourth mile of walk.

Holliday Park, three and one-haif acres, in ward Thirty-five, has one-half mile of walk.

West End Park, of seventeen and one-half acres, in ward Thirty-six, has one-half mile of macadam road and one and one-half miles of walk.

Grandview park, consisting of eighteen acres, in wards Twenty-seven and Thirty, has two miles of walks.

McKinley Park, of sixty-three acres, in ward Thirty-eight, has one mile of graded road, one and three-quarters miles of walk, and a quarter of a mile of bridle path.

Second Avenue Park, containing thirty acres, located in ward Two.

Lawrenceville Park, consisting of four and three-quarters acres, is situated in ward Seventeen, and is now being improved.

The total number of acres in the Allegheny City park system is three hundred and twenty-four, of which two hundred and twenty-four acres are on the heights overlooking the junction of the two great rivers, forming the Ohio, and this tract is known as Riverview Park. This makes the grand total in the twin cities parking system twelve hundred and sixty-nine acres.

One of the most frequently seen and highly appreciated of the smaller monuments of Greater Pittsburg is the one erected by Andrew Carnegie on Ohio street, in front of the Carnegie Library, in Allegheny City, at a cost of thirty thousand dollars, to the memory of the first public library founder in Western Pennsylvania—Colonel James Anderson. It was formally dedicated June 15, 1904. It was designed by Daniel Chester French, an American sculptor, and it is said to be among the finest pieces of bronze art in America. It consists of a monument proper, made of Connecticut red granite, to which

are attached two superb bronze statues—one a bust of Colonel James Anderson, and the other a colossal statue of "Labor," in the figure of a blacksmith with bared body, showing the great muscles of his arms. He is seated upon an anvil, one hand resting on the horn of the anvil, against which stands a huge sledge. In his lap is an open book, from which the brawny workman is represented as reading while he rests his body. Upon a tablet is the following inscription written by its donor, Mr. Carnegie:

"To Colonel James Anderson, founder of free libraries in Western Pennsylvania. He opened his library to working boys and upon Saturday afternoons acted as librarian, thus dedicating not only his books but his time to the noble work. This monument is erected in grateful remembrance by Andrew Carnegie, one of the 'working boys' to whom were thus opened this precious treasure of knowledge and imagination through which youth may ascend."

Colonel Anderson was an iron-maker, philanthropist and first to establish a free library west of the Alleghenies. He was born at Shippensburg, Pennsylvania, August 31, 1785, and died in Allegheny City, March 11, 1861. He was of Scotch-Irish descent, the son of Maj. William Anderson, who served in the Revolutionary war from Pennsylvania under General Washington, and came to Pittsburg about 1797. Colonel Anderson succeeding his father in the milling business, erected the pioneer steam saw and grist mill in this section of the state. He built the first iron mill in Allegheny in 1827; was a director of the West Pennsylvania Hospital and the House of Refuge. He was under General William Henry Harrison in the army of the Northwest, and commissioned colonel. In religion he was of the United Presbyterian faith. He established "The James Anderson Library and Institute of Allegheny City" in 1850. It was first located in the second story of a building standing on the corner of Federal and Diamond streets, and at first contained but a few hundred books. During the dark days of the Civil war these books were boxed up and stored in the basement of the city hall. Subsequently they were turned over to the school board and with 27,000 other books are within an elegant room in the high school annex. Of the original lot of Colonel Anderson's books, there are but about four hundred left.

Another monument was erected by popular subscription in Allegheny cemetery many years ago in memory of forty-five persons, mostly women and girls, who were killed by the explosion of the United States arsenal, September 17, 1862. This is a granite obelisk about twenty feet in height, counting base, sub-base and pedestal. Its sides contain the names of the unfortunate victims with their ages. On one panel of the base is a lengthy inscription now well weather beaten and half defaced by the elements, a part of which reads: "A horrid memento of a most wicked Rebellion."

Among the public drinking fountains are the Thomas Howe fountain on Fifth avenue, the same having been erected by Mrs. Howe in memory of her husband, and one located in the Allegheny park system, near the Hamilton

Battery monument, which is a solid cube of white marble, with drinking fountain on either side. The inscription on this popular drinking resort is "God's Pure Beverage." And on the various sides are the words: "Truth," "Love," "Purity" and "Fidelity."

In the northeast corner of the Allegheny Park stands a monument erected in honor of the Hampton Battery, which served during the Civil war from Pennsylvania. This is made of granite shaft four feet square and about ten feet high, upon which rests a figure of a gunner in standing posture holding his ram-rod, the swab of which extends far above his head. On the pedestal is the inscription "Hampton, Geary, Todd and Miller" on one side, while the reverse carries the names of the members of the battery; also on one face of the monument is: "Organized October 8, 1861, mustered out of United States service June 24, 1865." A metallic plate, cut to represent the state seal, is attached to one of the panels. At the foot of this monument stands mounted on granite a brass cannon captured at Santiago, Cuba, July 17, 1898, from the Spanish, and presented by the United States to Allegheny City in 1899, as a trophy of the Spanish-American war of 1898.

CHAPTER XL.

Clubs.

The Duquesne club of Pittsburg is supposed to be the best appointed one in Allegheny county. It was organized June 11, 1873, and incorporated November 28, 1881, and now enjoys a membership of more than fifteen hundred. It has long been the chief social factor of the city, and numbers among its membership perhaps more of the wealthy citizens of the county than any other society of its kind. Within its magnificent club house on Sixth avenue many great business enterprises have originated, for here have met in social and semi-business council many of the leading men of the state and nation. Their new quarters were opened in May, 1904. It is a remodeled brownstone palace on Sixth avenue, and is surpassed by none in point of elegance and artistic furnishings, all of which are of a purely original design. It affords the bachelor every convenience of the most refined home. On entering the broad Pompeiian corridor, one is confronted with plans and unique designs most striking and beautiful. Four massive Corinthian columns of waxed oak, mark the line of what was formerly the old corridor, and separates the apartment into twin rooms, furnished as nearly alike as possible. The spacious lounging room is finished in oak, with beamed ceiling with wall panels of red burlap. Oaken tables of various shapes are scattered about and oak chairs and divans upholstered with costly leathers, fill every available space in the room, which is covered with crimson carpeting. Two carved oak mantle pieces ornament either end of the apartment. In this clubhouse, one finds an eight-table billiard parlor, charming in its design. Then there is a cafe, a striking specimen of English carving in solid oak. The windows are of frosted glass set in leaded scrolls of Venetian designs. The dining hall and banquet rooms are marked by two tall Corinthian columns, and seats fully two hundred and fifty persons. Here the woodwork is finished in enamel white, with deep paneled ceilings, and a six foot wainscot enclosing green flowered panels of chaste patterns. The tables and chairs are of a dull finished mahogany, while the carpets are of a superb deep, rich red color. The chief architectural feature of this room is a musicians' balcony over the entrance door. The ladies' dining room is reached by an oak paneled stairway from

private entrance on Sixth avenue. This room seats one hundred guests. This clubhouse has the finest grill room in Pittsburg. There are eleven private dining rooms, six of which are arranged ensuite, on the third floor. On the topmost floor, are forty-three sleeping rooms, with private baths connecting. A barber shop and Turkish bath room is found in the basement. All rooms are provided with telephone service. The club now has in its employ about two hundred persons, while the membership is somewhat over fifteen hundred, with four hundred and twenty-five non-resident members. The average daily attendance exceeds five hundred.

Bellefield club was organized in 1888. A home atmosphere prevades this place. It is a social club, pure and simple, with no political significance. It is here friends and members meet for social chats, to play innocent games for amusement, etc. At first, this club had quarters between Fifth avenue and Ellsworth avenue, on Neville street, but at present their home is situated on North Craig street. It cost about $36,000. The apartments are heated by steam and illuminated by electricity. There are assembly rooms, billiard rooms, kitchen, bath rooms and all to make glad the guests and members. At present the club is made up of something over two hundred and fifty members.

Crescent Canoe club opened its present quarters near Verona, on July 4, 1906. It cost about five thousand dollars and is a handsome structure. The membership comprises among its number mostly men of the boatman's craft from in and near Pittsburg.

Oakmont Country club was opened in October, 1904, and is a real country clubhouse with grill room, library, bed chambers and is surrounded by some of the finest natural scenery in Western Pennsylvania.

The German Club of Goodfellows, whose home is on Craft street, was organized for German and German-Americans of Pittsburg. All rank, title, wealth and politics are relegated and disregarded in membership, but each member must be voted a "Goodfellow." Its membership is about two hundred and fifty, mostly all of German birth and include many students of science, university graduates from the Fatherland and this country. This club was incorporated April 1, 1905. They entertain many foreign dignitaries. They built a fine clubhouse at an expense of $40,000.

The Twentieth Century club was organized in October, 1894. It is an association of the most cultured women of the cities. It is not founded upon any community of business, art, music or literature to collect those who do not naturally belong together, and is the only club of its kind in Pittsburg. It was first proposed by Miss Julia Morgan Harding. Among its charter members were the following: Mrs. George Bergwin (the first president), Mrs. James R. Mellon, Miss Sarah H. Killikelly, Lillian Mercer Marshall, Mrs. W. N. Frew, Miss Annie S. Phillips, Mrs. Hagerman, Miss Kate McKnight, Mrs. O. D. Thompson, and others—about twenty in all. Their first home was at 408 Penn avenue. In April, 1898, it was determined that larger quarters must be obtained and then the present place was provided on Duquesne way,

where they have seventeen rooms, with all the real homelike conveniences, together with a library, whist rooms, parlors, writing and reading rooms, bath rooms, etc. Women who come satisfactorily recommended may join for the social features, alone, or for clubhouse privileges, which allows them to bring friends there, receive mail, stop for a rest while down town shopping, take a cup of tea and have their parcels checked and delivered there, and when necessary, a suburban member may stay all night in the club room chambers. This club numbered four hundred and thirty-five members in the month of September, 1907.

Not alone, have the men of Greater Pittsburg succeeded in forming and maintaining worthy clubs, but the women of the twin cities have long been noted for their enterprise and up-to-date management of such societies. Not gradually, but with marked rapidity, have the women's clubs of Pittsburg multiplied. Not until about a third of a century ago were the women recognized as literary workers, newspapers and magazine writers and as competent to take charge of regular clubs for their own improvement.

The Woman's club of Pittsburg, was organized in 1875, and is the oldest, in the state of Pennsylvania. It is the first daughter of the Mother's club—Sorosis, of New York City, and is older than the New Century club of Philadelphia by two years. It was the inspiration of a little band of progressive, intellectual women, who wield the pen, and were engaged in literary pursuits, sub rosa. The real original promoter was Mrs. Helen P. Jenkins, who gave a tea party and brought to light the question of forming a woman's club. She issued invitations on blue paper with blue stocking designs, requesting the invited guest to wear something decidedly blue, for it was to be a "blue idea," inasmuch as every woman who wielded a pen in that day, for any purpose save that of friendly correspondence, was an unpardonable "blue stocking." This "blue" notion obtained—the dishes were blue, blue were the flowers and ices and ribbon used in decorating—all blue save the happy guests, and as a crowning climax, a real blue stocking was presented to Mrs. Jane Gray Swisshelm, the queen of all literary women of her day in Pittsburg. Among the guests were the leading press women of that day in and around Pittsburg. The object of the club was set forth as follows:

"To bring together women interested in art, literature and science for the purpose of mental culture, mental help and whatever tends to the advancement of woman."

The present membership is eighty-three. This society has recently been granted a charter under the name of the "Woman's Club of the Greater City of Pittsburg." At present the meeting place is at the Grill room of McCreery & Company, Pittsburg.

Among the many other clubs of less note in Pittsburg and its environments, may be named the Americus Republican club, which, as its name denotes, is a political society, with headquarters at Penn avenue and Fourth;

the Union club, with a well furnished set of palatial apartments in the Frick building; the University club, near Fifth avenue in Bellefield; the Concordia; the Business Women's club; the Woman's Press club; the Allegheny County club, in Sewickley; and the Pittsburg club, the last of which was formed April 5, 1879.

CHAPTER XLI.

The Carnegie Institute—The Libraries of the Cities—The Technical School.

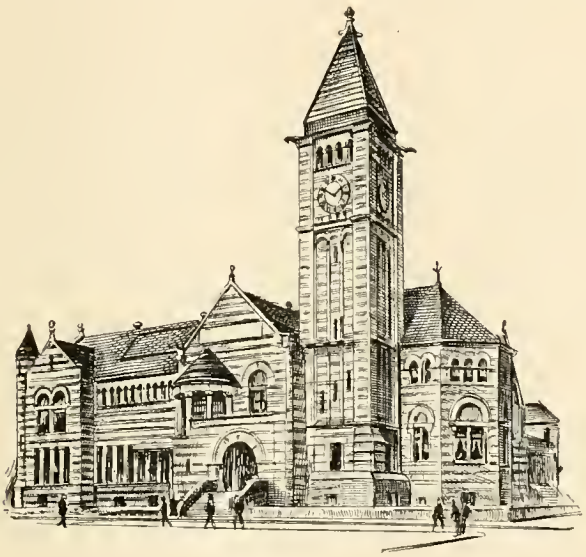
Third in prominence among the features for which Pittsburg has come to be widely known throughout the world, is the great Institute and Free Library, founded and presented to the city by the world famous ironmaster, Andrew Carnegie—the iron industry and banking interests alone coming first in their power and universal scope.

The institute was the outgrowth of the free public library, and for this reason, at times, the relations of the one to the other, have been misunderstood. That a clear distinction of the two institutions may be had before giving their history, it may be stated that in 1896 Mr. Carnegie added to the original library plan, an art gallery and museum, and named a board, consisting of eighteen citizens of Pittsburg, as well as all members of the library board, ex-officio, making a board of thirty-six members, organized under the title of, "The Carnegie Fine Arts and Museum Collection Fund," with an annual allowance of fifty thousand dollars, which amount was subsequently greatly increased. In 1898, the name of the society was changed to that of the Carnegie Institute. Still later Mr. Carnegie furnished additional funds for the erection and maintenance of a technical school. Therefore, what is now known as the Carnegie Institute, consists of three departments—fine arts, museum and a technical school, the first two of which are located in the Central building of the Carnegie Library at Pittsburg, while the third department is provided with buildings built especially for itself, on grounds across a ravine but not far distant from the library.

The founding of these great educational institutions was fraught with much delay and doubtless required great patience on the part of Mr. Carnegie, who never during the quarter of a century, which it took to bring about the end he originally had in mind, showed even the least impatience. He waited for the people of Pittsburg to advance to the broad, high plane upon which he stood, and when that time arrived his plans matured rich with his liberal gifts, making the perfected institutions of today possible.

On November 25, 1881, Mr. Carnegie made an offer by a communication to Hon. Robert W. Lyons, who was then mayor of Pittsburg, to donate

$250,000 for a free library, providing the city would agree to appropriate $15,000 annually for its maintenance. On account of public opinion being against it and for the further reason that under existing laws in Pennsylvania, it was impossible for the city to legally levy a tax for such a purpose, this most generous offer was not taken advantage of by Pittsburg. Allegheny City,



CARNEGIE LIBRARY

In Allegheny, now North Side.

however, showed a praiseworthy, progressive spirit which caused them to ask Mr. Carnegie to remember them in making his library gifts, which he cheerfully did by donating to that city a free library and music hall costing $300,000 and which was dedicated on the evening of February 20, 1890. Among the prominent men who took part in the ceremonies were: the president of the United States, Benjamin Harrison, Gov. James A. Beaver, of Pennsylvania, members of congress and men from distant states. The brilliant ovation tendered the noted guests opened by the great organ's thrilling notes in "Hail Columbia" which announced to the waiting throng within the new library, that the founder, with the president and other speakers were about to appear. Upon their entrance, the vast assemblage arose and heartily sang "America," enthusiastically repeating the words "My Country 'Tis of Thee, Sweet Land of Liberty." James B. Scott, the chairman of the building committee served as chairman of the meeting and at once introduced Mr. Carnegie. The philanthropist, soon to become the greatest the world has known, stepped to the center of the front of the platform amidst a tremendous outburst of applause. He held in his hand a golden key tied with long loops of blue ribbons, inscribed with golden letters. Mayor Pearson of Allegheny stood beside Mr. Carnegie, and as the key was placed in his hand the great wave of applause swept

through the building, when the acknowledgement of the receipt of the key was made and the two gentlemen clasped hands in a hearty manner. Mr. Carnegie then spoke as follows:

Mayor Pearson: My wife—for her spirit and her influence are here tonight—my wife and I realize how infinitely more blessed it is to give than to receive. Before handing over this building to you, sir, as the representative of the people of Allegheny, permit me to publically return my thanks to the able committee who have devoted so much time and ability to its construction and congratulate them, as now I see as I never saw before how worthy they are to be congratulated upon the permanent success of their labors. While every member of that committee has done so well it may not appear wrong in me, I hope, to name any one, yet I am sure you will all agree with me when I say that the amount of labor and responsibility which necessarily devolved upon its chairman justifies me, and I am sure I only speak your sentiments in returning special thanks to the chairman, John B. Scott. He has done his city a great service and I trust it is a service of the character which will call upon the facilities and talents in the future. I must thank the President of the United States for the transcendent honor which he has bestowed upon us. I must thank the governor of the state of Pennsylvania and I must thank the representatives in congress from Allegheny county and Mr. Pratt, of Baltimore, who is the pioneer of free libraries and Mr. Langley, who is one of yourselves; all of them who have thought the opening of this building worth while to travel hundreds of miles that they might set their stamp of approval upon this dedication. [Applause].

This institution starts well. The holder of the most exalted, the holder of the mightiest political office in the world stands forth as the illustrious sponsor at its christening.

I must not pass without thanking the architects, Messrs. Southmeyer & Pells, who have given us a structure which on every hand is pronounced a perfect gem.

Mayor Pearson, I never had the slightest doubt, and I have no doubt now, but that you and your successors will so manage this institution that it will bring forth the goodly harvest which it is capable of producing. I wish also that the masses of working-men and women—the wage-earners—of Allegheny county will remember and act upon the fact that this library, the gallery and the hall are yours. The poorest citizen, the poorest man, the poorest woman that toils from morn till night for a livelihood (as thank heaven I have had that toil to do in my early days), as he reads these books, listens to the organ and admires the works of art in the gallery equally with the millionaire and the foremost citizen I want him to exclaim in his heart: "Behold all this is mine—I support it—I am proud to support it—I am joint proprietor here."

A few words of personal character in conclusion. It was in Allegheny City that my parents, with their two boys, in this generous and ever hospitable Republic first found a shelter and a home. [Applause.] All of our early associations cluster around this vicinity and it is therefore impossible that any other spot on earth can fill the place which Allegheny must ever hold in my heart, even for the sake of those dear to me who sleep among you and must have a home in my breast forever.

You have been good indeed to the Scotch family of immigrants, and another mark of your goodness to us permit me specially to acknowledge. You have seen fit, voluntarily, to link our family name with this building. This has touched me deeply, for Mr. Mayor, ladies and gentlemen, I would

that our family name might be held worthy of lasting remembrance among you. Surely it does not make one feel that he deserves such honors, but makes him realize that he should be more deserving of it. Mr. Mayor, I hand over to you the key which places you in possession, as the representative of the people of Allegheny, of these buildings, to be their property forever. My warmest wishes for the prosperity of every citizen of Allegheny go from the depths of my heart with this gift.

Mayor Pearson responded in the following words:

As the chief magistrate of the city of Allegheny, I accept this key tonight. At the same time permit me to extend to you the thanks of our grateful citizens for the beautiful, grand and costly gift. It is, sir, a noble gift—a monument that will stand for years, when you have passed away—a monument that will stand an immortal testimonial to your benefactions and will keep your name before them—a name that will not be forgotten. This is free to all rich and poor and many a pleasant hour will be spent herein. There are few cities that can boast of the same generosity of one man.

Upon the chairman announcing that President Harrison should declare the free library open, the audience arose and tendered him a mighty and prolonged ovation. Three times did he attempt to be heard before he could proceed. From the very outset, it was observed that the speaker was a polished orator. He spoke as follows:

Mr. Chairman and Fellow Citizens: I have spent a very instructive day in Allegheny county. I have seen that which was only fit in its crude state, to be trodden under foot of men transmitted into that which serves the highest of material lives. I have seen that which was of prodigious weight defying the direct application of the arms of man to move it lifted by the skillful inventions of his brain, as the baby would lift the toy that the fond mother places in her hands. [Applause.] Yet great and striking as these transformations have been, I witness here tonight one that is greater and finer. [Applause.] The dull ore of the mine is transmitted into those forms that serve the purpose of our present life. I have seen made today the rod upon which the throbbing engines carry the commerce of a great nation, the engines that hold safe within their grasp the power of steam that propels the great ships upon the sea in the vessels that bear everywhere throughout the world this message which this fair republic sends to the kindreds of people. [Applause.]

But here tonight, we witness the transformation of what we are wont to call the precious metal into something that blooms for eternity. We will find the suggestions here in the instructive volumes that are to be crowded into these alcoves, the impulse, the spark that is to touch the slumbering mind of many a stalwart boy and many a bright, ambitious girl, into life that will make them servants of their fellow-men and the companion of the Son of Man, who left His glory to serve the race. [Applause.]

I saw today in these great works of industry young men not yet in middle life, controlling these great mills and the suggestion came to my mind how this institution would promote the interests and intelligence of the young men of this progressive community. Because it is the mind of man that has wrought out these great achievements. The hand is not cunning in itself.

It is from the brain that it gets the impulse and the teaching that enables it to perform the difficult tasks which are alone to distinguish the man. I hope that this institution may carry with it, always, and with every book that rests upon its shelves the suggestion to those who will participate in its blessings, "Read and think." Because unless thinking accompanies reading, there is not much profit in books. [Applause.]

I congratulate you that you have a citizen who could conceive a work like this. [Applause.] I am sure it will be an impulse and an instruction to others who dwell among you, and that its influence, together with those other illustrations of a kindred nature, which we find among you, until those who have accumulated wealth feel that they hold it as trustees for mankind. [Applause.]

May I not do what I will with my own? Is it a selfish spirit that dictates to personal luxury the fruits of toil to be paramount? How much higher and nobler use of accumulative wealth have we before us in this magnificent structure tonight. [Cheers.]

Allegheny City having taken the initiative and having secured a splendid library, the people of Pittsburg, which city had made rapid growth in the meantime, now sought out the already noted library founder to see if he would still entertain his former proposition to the city of Pittsburg. This action was brought about by William N. Frew, member of the select council, who was finally sent to Mr. Carnegie's New York City home to present the matter to him. He was received and at once made welcome, notwithstanding the years of unwarranted time which had elapsed since his generous offer had been made to Pittsburg and really spurned by her people. Mr. Carnegie made answer to Pittsburg's legal representative in the following words:

Yes, I have a very vivid recollection of offering that money to the city, and I am perfectly willing to stand by my proposition, except that I now think that I should really give more. For Allegheny library I gave $300,000 and I think that as Pittsburg is so much larger I ought, at the very least, to give $500,000.

Matters drifted along until sometime in 1886, when it was found that proper legislation could be had, and then the city of Pittsburg passed an ordinance in which was incorporated Mr. Carnegie's original offer, the city accepting the same and empowered the mayor and presidents of the select and common councils to serve ex-officio on a board of trustees to be named by the donor. In 1887 the enabling act passed by the Pennsylvania legislature and Mr. Carnegie was notified that the city was able to perform its part of the contract. This brought another letter from Mr. Carnegie, dated February 6, 1890, in which he stated that as Pittsburg had greatly increased in size and importance during the intervening years, he was of the opinion that more extensive buildings were needed, containing reference and circulating libraries, accommodations for the exhibition of works of art and assembly rooms for their various learned societies, and suggested the erection of branch libraries. To provide these structures he offered to expend not less than one million dollars and proposed

to place their erection in the hands of a committee or board of eighteen members, nine of whom he should select and the remainder to be composed of the mayor of Pittsburg and the presidents of the select and common councils, and other members. The conditions attached to Mr. Carnegie's liberal offer, was that the city should bind itself to place in the hands of a board of trustees, forty thousand dollars annually, for the maintenance of the library system and that the trustees appointed by Mr. Carnegie should have the power to fill all vacancies occurring in their numbers.

May 31, 1890, the city ordinance accepting his second offer was passed. At the first meeting of the board of trustees, which convened March 12, 1890, James B. Scott was made its president, H. C. Frick, treasurer, and William N. Frew its secretary. James B. Scott was also made chairman of the building committee. An invitation was immediately sent out throughout the United States and Canada, soliciting bids for plans and specifications for the erection of the numerous buildings required, and as a result ninety-seven architects were represented from all parts of the country and they exhibited one hundred and two sets of plans. This exhibition was made in a large room provided for the purpose in Pittsburg. After weeks of careful study and mature deliberation, the plans offered by Longfellow, Alden & Harlow were adopted. Nearly thirteen hundred drawings were on exhibition—the most ever assembled in this country for any one building contract. They represented fifty thousand dollars worth of expert labor and skill. Among the plans inspected were two from Canada. Following this came months of work for the committee to develop and mature the plans adopted. When it was decided to use stone instead of Florentine brick for building these structures, as first contemplated, and as $300,000 had been set aside for branch library buildings, Mr. Carnegie very generously added $100,000 to the $700,000 already set apart for the main structure. In making his offer to the city of Pittsburg, Mr. Carnegie stated to the city council:

I am clearly of the opinion that it is only by the city maintaining its public libraries as it maintains its public schools that every citizen can be made to feel that he is a joint-proprietor of them, and that the public library is for the public as a whole and not for any portion thereof; and I am equally clear that unless a community is willing to maintain public libraries at the public cost that very little good can be obtained from them. Not to save the further expenditure therefore, but for the best interests of the city, I make it a condition that they shall be properly maintained by the city.

The original board of trustees for the Carnegie library was as follows:

James B. Scott, president; W. N. Frew, secretary; H. C. Frick, treasurer; K. Q. Bingham, R. B. Carnahan, E. M. Ferguson, H. B. Ford, W. J. Holland, G. L. Holliday, J. F. Hudson, J. B. Jackson, A. F. Keating, J. S. Lambie, Reuben Miller, George A. McBeth, William McCallin, David McCargo, W. H. McKelvy, H. K. Porter, S. H. Shannon. The ordinance was signed by the presidents of the two city councils; attested by the clerks, George Sheppard and George Booth, and approved by the mayor, William McCallin.

An engrossed and beautifully bound copy of the resolution passed by the city council, in accepting Mr. Carnegie's offer, was presented him, at his Fifth street office in Pittsburg, October 15, 1890, and in response he said, in part:

I am certain that among all the influences for good which Pittsburg is to possess that this free library and its branches will occupy a place in the foremost rank. The longer I live the more important I believe a free library and branches to be to a great manufacturing community like Pittsburg. If the art committee expended fifty thousand dollars per annum forever in the purchase of suitable material for a technical museum and also for the best illustration of American painting and art, the result must be that as the years roll by we shall have in the city of Pittsburg an historical school of American art. The amount of the Chantery bequest expended by the National Academy of Great Britain is only twenty thousand dollars per annum and we know what it has done for London already. We are all Pittsburgers; I have made my fortune here and by the aid of very enterprising partners I find myself busily engaged in investing it here. I link my fortunes with Pittsburgers—stand and fall with them.

A city ordinance was passed in 1891, allowing the erection of the Central building on a part of the nineteen acre tract of land at the entrance of Schenley Park, which had been purchased of Mrs. Schenley for $75,000, to be paid for in three equal annual installments. This land has twelve hundred feet frontage on Forbes street and after long delay and much local strife and parley, both among the trustees and city council, was selected as the place upon which to build the Carnegie buildings. The only condition upon which the owner of this beautiful and very valuable piece of land would dispose of it, was that it should be forever set apart and used for library and art purposes.

Having settled the question of location, the work of construction was at once begun. The foundation of the structure was completed in the autumn of 1892 and the contract for building the superstructure was let in May, 1893, to Henry Shenk, who commenced operations in July, 1893, and pushed them forward with all possible speed for a well constructed building, without any interruption until November 5, 1895, when it was formally dedicated.

The president of the board of trustees, and chairman of the building committee, James B. Scott, died in February, 1894, and his place was filled by W. N. Frew. In 1894 a committee of the board of trustees on branch libraries was appointed with H. P. Ford as chairman. Finally, seven locations were selected for such building sites, three of which were on the South Side, one in Hazelwood, one in Lawrenceville, one in the East End and one in the old city. Before two years had rolled away it became apparent that the main building was too small and during one of Mr. Carnegie's visits to the city, he suggested that plans be made for an enlargement. The new work was estimated to cost $1,750,000 and in April, 1899, Mr. Carnegie offered to place this amount to the credit of the trustees, suggesting that the work be commenced at once. But before passing from the original building plan, let it be stated that the first structure, now commonly known as "the old part," was of

the early Italian renaissance style of architecture simple in outline, the striking features being the two lofty towers which rose near the front of the building. At that time, it was looked upon as the greatest ornament the city's architecture possessed. It had what was styled "the grand gold hall" on the second floor, running from the gallery to the museum, which was ninety-one feet long, forty-four feet wide and thirty feet in height. These dimensions have been greatly multiplied in the enlarged and present structure.

While the matter of gaining title to more land for the new building was shaping itself, the changes in the builder's plans had increased the amount to $3,600,000. In April, 1901, the re-modeled plan was approved by Mr. Carnegie, but Mr. Frew, member of the committee had other plans which at the same date he unfolded for Mr. Carnegie's inspection. With no little hesitency Mr. Frew remarked that the plans shown would cost $3,600,000, and would provide for the next ten years, but that the one he was about to show him, would provide a home for library and institute, for the next century. Mr. Carnegie carefully examined the last plan and finally remarked: "And how much will a building like that cost?" speaking it is related, as unconcerned as though he were about to purchase some trifling article. Mr. Frew replied that it would cost *five million dollars,* adding that, "It is an awful lot of money but we think it is worth it." "And so do I think so," said Mr. Carnegie, "and we will takes these plans by all means." He then took his pen and wrote a brief note to R. A. Franks, his financial representative in Pittsburg, which was as follows:

R. A. Franks.

My Dear Mr. Franks:

Please place to the credit of the board of trustees of the Carnegie library five million dollars, and oblige,

Yours very truly,

A. CARNEGIE.

With this enlarged scale for the new buildings, more land was necessary, and in order to obtain it, condemnation proceedings against property consisting of some well built and valuable residences had to be instituted. The work of excavating for the new structure began in November, 1903, the work taking all winter, and a portion of the spring months. In July, 1904, the contract for the superstructure was let to William Miller & Sons, but active operations did not begin until some time in November of that year. So well was this gigantic undertaking planned and carried into execution that this lasting monument to the world's greatest philanthropist was completed in time for the Founder's Day opening exercises, an April 11, 1907. As it now stands, the Carnegie Institute and Library is about six times its original size, and proportionately elegant in finish and utility.

The prime inspiration back of the founding of this great institute, came about through a seemingly trivial incident in Mr. Carnegie's early life. It is one often referred to by newspapers, but not generally credited as the truth,

yet it was later vouched for, by Mr. Carnegie, in his address on Founder's Day, 1895, in the following words:

Our newspapers recently quoted from a speech in which I referred to the fact that Colonel Anderson—honor to his memory—opened his four hundred books to the young in Allegheny City and attended every Saturday to exchange books, and that to him I was indebted, as was Mr. Phipps, for admission to the source of knowledge, and that I then resolved that if ever surplus wealth came to me (and nothing seemed more unlikely, since my revenue was $1.20 a week as a bobbin-boy in a factory—still I had my dreams) it should be devoted to such work as Colonel Anderson's. In the opening tonight, of this free library to the people, my boyish dreams are again realized. But, I came by heredity to my preference for free libraries. The newspapers of my native town recently published a history of the free library of Dunfermline and it is there related that the first books gathered together and opened to the public, were small collections of books from three weavers. Imagine the feelings with which I read that one of these three was my honored father. He founded the first library in his native town and his son was privileged to found the last. Another privilege is his—he has built and founded a library for the people here in this county in which he has so greatly been blessed with material success. I have never heard of a lineage for which I would exchange that of the library-founding weaver.

In this brief description of the exterior and interior of these massive buildings, it is assumed that they will stand out as prominent specimens of architectural skill, and be seen by many generations yet unborn, thus speaking more forcibly in way of description than can any cunning combination of words and phrases, placed upon the printed pages of a local history written today. We were foolish indeed did we attempt to describe Niagara Falls for those who live near by it, for the awful sublimity of the great cataract with its thundering torrents will speak more eloquently than can tongue or pen, and its waters will not cease to leap from the rocky precipice, and plunge into the mist and foam of the abyss below, until long after the historian of today and his books have passed into oblivion. Likewise, these magnificent buildings, composing the Carnegie benefactions in Pittsburg, will stand as monuments of skill and types of fine architecture when the books descriptive of their beauty, shall have been long forgotten.

They are situated at the main entrance of Schenley Park, Pittsburg. The library and institute, with its magnificent art gallery, music hall, hall of architecture, natural history hall, etc., occupies more than four acres of ground space, outrivaling the national capital by more than half an acre and equalling that occupied by St. Peter's Church at Rome. This one Carnegie structure contains more fine marbles than any of the palaces, or public buildings in the Old World, while its only pretended rival in this country is the congressional library in Washington. It has more marble columns of various colors, shades and tints, and they were procured at a greater expense, than any other structure standing on the earth, today, and in this it nearly approaches the fabulous accounts of the temples of antiquity. The columns found as supports in the

music hall, cost four thousand dollars each, while those within the hall of sculpture cost one half this sum. The new building alone has twenty acres of floor space, and is lighted by over 25,000 square feet of wired glass. It also contains 2,100 windows and five hundred doors. Those opening to the main entrances, are of solid bronze, and weigh 3,300 pounds each. The material and work in erecting the steel-structural work, cost half a million dollars. The weight of the steel used in the building is greater than that of any other building on the American continent. Its weight is nearly thirteen million pounds, while that in the New York library was but nine million pounds, and that in the National museum, at Washington, but eight million pounds. The exterior walls of this structure are of Cleveland sandstone, which was selected because it was supposed to keep its color better in Pittsburg than granite or any other material. It fronts on Forbes street, along which it extends for four hundred and sixty feet, while the facade runs along the park entrance for six hundred and forty feet. The most recently built portion of the structure was so planned that it includes the original library and music hall, without destroying the symmetry of the whole, the removal of the two high towers of the former building, being all the radical changes made necessary in combining the old and new parts. This, like most great structures, does not carry with it the graceful outlines of architectural beauty found in smaller sized buildings, but it is a true type of Italian renaissance architecture. The second story of the facade is somewhat relieved of its plain appearance, by the huge Corinthian columns, and artistic pilasters, which jut out from the main wall. The colossal bronze figures, placed at the front entrance, representing literature, music, art and science, as well as these poised on the main cornice, fully seventy feet from the pavement, lend a dignity to the whole structure, and at the same time, indicate to the passer-by the purpose for which the building is used. The Forbes street front carries this bold inscription, extending along the entire frieze:

THIS BUILDING DEDICATED TO LITERATURE, SCIENCE AND ART IS THE GIFT OF ANDREW CARNEGIE TO THE PEOPLE OF PITTSBURGH.

The original building, which now includes the library and music hall, was 148 by 393 feet on the ground, measuring by the wings. The structure was built in the shape of the letter H, with a music hall in the north wing; it also had a wing devoted to art, one to the library and contained a hall of science a museum and lecture room. It was surmounted by two high towers, which were dispensed with when the extension was added. Good judges, whose observation had been extensive through much travel, declared it to contain the finest music hall in the country. Its ceiling was exquisite in design, and was terminated by a handsome dome of one hundred and twenty feet in diameter. On the front entrance of the library department (as now), it had carved in conspicuous letters, over the approach-way, these words: "Free To

The People." This building was dedicated on the evening of November 5, 1895, at which time Mr. Carnegie was present, and made a lengthy address. His closing words were as follows:

Mr. President: It only remains for me to hand over this property to you, as representing the commission, in trust for the city. At your coming meeting, the endowment promised for the art gallery and museum will be arranged. I desire to consult a body of men who have shown such rare managing ability, before deciding what form to adopt.

Mrs. Carnegie and I, who have given this subject much thought and have had it upon our minds for years, survey tonight what has been done; the use to which we have put our surplus wealth; the community to which we have devoted it, and if we had the decision to make again, we should do precisely as we have done. We feel that we have made the best use of this surplus wealth, according to our judgment and consciences; beyond this is not for us to say; it is for the citizens of Pittsburg to decree whether the tree planted in your midst, shall wither or grow and bear such fruits as shall best serve the county, where my parents and myself first found in this land a home, and to which we owe so much.

There is nothing in which we have done here that can possibly make evil and must work good, and that continually. If a man would learn of the treasures of art, he must come here and study; if he would gain knowledge, he must come here to the library and read; if he would know of the great masterpieces of the world in sculpture or architecture or of nature's secrets in minerals which he refines, or of natural history, he must spend his time in the museum; if he is to ever enjoy the elevating solace and delights of music, he must frequent this hall and give himself over to its sway. There is nothing here that can tend to pauperize, for there is neither trace nor taint of charity, nothing that will help any man who does not help himself; nothing is given here for nothing. But there are ladders provided upon which the aspiring may climb to the enjoyments of the beautiful, and to the delights of harmony, whence come sensibility and refinement to the sources of knowledge, from which springs wisdom; also wider, grander views of human life, whence comes the elevation of man. We now hand over the gift; take it from one who loves Pittsburg deeply and would serve her well.

The present structure, which includes the original building just described, and the extension which is five times the size of the first one, and which was dedicated April 11, 12 and 13, 1907, is one of the few great buildings of the world. Its dimensions, proportions and magnificence, must be seen rather than read about, in order to be even partially appreciated and understood. It occupies nearly five acres of ground space—four hundred and sixty by six hundred and forty feet and it covers nearly that much space, for it is quite regular in form. It is three stories in height and is one hundred and thirty-eight feet high from the basement to the highest point on the roof. The exterior presents to view the most massive building in America, while the interior impresses one with an array of exquisite beauty, costliness and special charm, found in no other building in any country, or in any age of the world. Within this structure there are more marble columns than are found in any other building on the globe. Its thousands of square yards of marble, the

finest that could be procured, fairly dazzles the eye of the visitor with their rich color-tints and delicate texture. There are more than four miles of marble wainscoting in this building, and one hundred and thirty-two acres of wall surface covered with plain painting, a space equal to 1,150 city lots each 50 by 100 feet. Throughout the entire building, including the miles of corridors and bases, walls, floors, columns, etc., there are six thousand tons of marble, representing a cost of $750,000. It is estimated that the marble in the hall of sculpture alone, cost $100,000, while the green Tinos columns of the foyer, and the costly marble flooring and wainscoting, cost $200,000. Tennessee marble is chiefly used for flooring and bases, the contract calling for 200,000 square feet of flooring, and ten miles of base. This was the largest contract ever placed for such material. Another record-breaking feature in the construction of this building may be seen in the hall of sculpture, where there is more genuine Pentelicon marble, the finest marble yet discovered, used in the Doric and Ionic columns, and numerous pedestals, than can be found in all the other public buildings in the United States, while the foyer, with its chaste columns, contains more Tinos marble than is found in all the other buildings of America. Most of these marbles were obtained within two years, and the proprietors of the quarries in Greece, from which they were obtained, claim that the quarries never furnished such contracts in so short a time, and never so much material to any one country. Each piece was carefully inspected, and strange to say, among all these columns of rare and beautiful marble, there was but one defective column, which was placed in position in the hall of sculpture before its defect, which was but slight, was detected. It was at once removed, and another perfect in its appearance, sent for, and later put in its place. Some of these columns, because of their size, were only obtainable in inland quarries of Greece, and hence had to be drawn many miles by means of ox-teams. Among the gems in way of beautiful columns, are those in the hall of sculpture, which are of the most faultless, milk-white Pentelicon marble, dug from the same quarries from which the marble for the Parthenon itself was obtained more than twenty-three hundred years ago. Aside from the inside doors, there is scarcely a particle of wood in the building, the floors being of tile, cement or marble. They are covered with 100,000 square feet of rubber tiling, which was the largest contract ever given for such goods in this country.

The mere erection of the institute building was remarkable in itself, only consuming, as it did, thirty months of time. As it stands today, it contains 165,000 square feet of fine cut stone, all of which was fashioned on the grounds as the work proceeded. The weight of this cut stone is twenty-eight million pounds, equal to fourteen thousand tons. Besides this, there was used in the walls, eleven millions of brick for backing purposes.

The two notable sights of the institute proper, are two halls, which were the special ideas of Mr. Carnegie, namely, the hall of sculpture and the hall of architecture, each included in the department of fine arts. The hall of

sculpture in its general plan of finish, is copied from the Parthenon itself, and presents beauty on every hand. The whole room is of white marble, with a long colonnade supporting the cornice and balcony. Within this spacious room one stands, spell-bound, surrounded with veritable crystalized inspirations of the greatest artists that all ages of the world have yet produced. Here one beholds the designs of Phidias and other sculptors, who lived and died thousands of years ago.

By all odds the hall of architecture, even to the casual visitor, is the most singularly striking of all rooms within this institute building. In no other place in the world is there to be seen a similar hall, or so fine a collection of classic types of architecture. The room is one hundred and twenty-six feet square and rises to the height of one hundred and thirty-seven feet to its glass dome. It is surrounded by a gallery supported by twenty-eight Ionic columns, each twenty-six feet in height. Assembled in and around this colonnade, may be seen some of the grandest specimens of the world's architecture, including the portals of the Abbey Church of St. Gilles, France. This superb cast is nearly ninety feet long and is thirty-eight feet high. This hall contains architecture as it existed in the various centuries, much of it coming from ages which antedate the reign of the Cæsars by many centuries. Besides the vast collection of reproductions in architecture already placed in this hall, there are more than one hundred specimens not yet installed. They are designed to give a comprehensive chronological history of architecture from the earliest dawn of authentic history to the present day.

One entire hall, forty-eight by one hundred and forty-four feet, is devoted to bronze exhibits, largely objects reproduced from those found and recovered from the ruins of Pompeii and Herculaneum. In this collection Mr. Carnegie has taken great interest; they include almost every imaginable article of domestic use from table articles to bronze couches and chairs.

The museum department is a veritable world within itself, containing as it does, over one million different objects, ranging from dried and cleverly mounted insects, small as the eye can detect to stuffed mammals of mammoth proportions. Here one also sees the wonderful skill of the trained taxidermist, in thousands of the world's feathered songsters, and cunning animals; domestic animals and groups of the more savage kinds, including tigers and lions. The geological specimens are numerous and precious in many hundreds of cases especially fitted for their safe keeping. These are all properly classified and neatly labeled, as are the many varieties of native and foreign woods and other exhibits of vegetable growth. Then there are the spacious galleries devoted to reptiles and fishes, with a collection of over two thousand rare shells. But with all this immense array of once animated creatures, it was left for the United States to furnish the most striking and largest of all, the skeleton of the mastodon, Diplodocus, which was unearthed in a deep ravine in Wyoming territory. This rears its mighty form in the center one of the largest of halls in the museum, and besides which every other object seems dwarfed in stature.

It is mounted in life-standing position and is fourteen feet high. Including head, neck, body and tail it measures eighty-four feet and six inches, while the separate bones of its legs are equally large in proportion, some of them weighing over six hundred pounds. This at once attracts all who enter the museum. Plaster casts, or true reproductions of it have been made by Mr. Carnegie for several European museums, including those sent to England, France and Germany.

The collection of local historical relics is large and well selected. Among these is the old piano which belonged to Stephen C. Foster, and upon which he first produced by magic touch the melodious notes of the "Old Folks at Home." Forty assistants, of scientific tastes, are in charge of this department. Men of science and letters make special tours to Pittsburg, from all over the world, for the purpose of viewing this rare collection of strange and intéresting objects, housed in the 104,000 square feet of space provided for them.

The music hall was changed but little when the new part of the structure was added. It seats 2,100 people easily, and is scarcely rivaled in this country for light, comfortable seats and acoustic properties. In this hall are held the popular concerts of Pittsburg, including the regular Sunday concerts, at which at all times the seating capacity is crowded to its utmost. These concerts are free and highly appreciated by the thousands who attend them.

What is known as "Founder's Room," is wainscoted with Italian marble, and the walls are exquisitely decorated with panels in handsome colors, inclosed in hand-carved mouldings in richly gilded fleur de lis designs. The furniture is artistic and is mainly made up of faithful copies of pieces discovered in Italy, all being richly covered with leather.

The foyer is literally a glittering glory presenting an imposing magnificence seldom if ever equalled in the world's most magnificent structures. It is sixty by one hundred and thirty-five feet, rising forty-five feet, to a golden cornice and ceiling, presenting an appearance indescribable. Here are twenty-four huge monolithic columns of costly Grecian marble, each three feet in diameter, which on account of the immense size of the hall itself, seem much smaller. The gold-leaf in this room predominates and was not placed as usual, but was beaten directly into the metal forming the gallery, cornice and ceilings. This foyer is on a level with the music hall balcony and is intended as a promenade during concert intermissions, etc. This room is easily the finest and most elaborate of any in the series of grand rooms within the building, made up of so many of rare excellence and majestic beauty.

What has been very appropriately styled "Alexander's Hall," is of unusual design and of special interest to the people of Pittsburg and Allegheny county, from the fact that this is the home city of the great mural painter, John W. Alexander, who executed the work, he having become famous in decorative art. This world-renowned artist was born in Pittsburg, where he served as a telegraph messenger boy, but became an artist and was awarded

the sum of $175,000 for the execution of this work in the Carnegie Institute, erected by Mr. Carnegie, who himself was once a Pittsburg telegraph operator, a remarkable coincidence indeed. In this series of murals within the front entrance of the main building is one entitled "The Development of Pittsburg," in which over fifty of the true-to-life scenes representing the great iron and kindred industries of Greater Pittsburg, have been painted from nature by him. Among the typical scenes, is a mailed figure of a warrior rising from a glare of intense heat and surrounding him are the painted forms of women and children bringing him their offerings, representing the various arts and sciences, as well as every grace and culture, from all over the world, all bringing tribute to Pittsburg. In this painting, are fifty-two faces, all painted from models. Wherever marble, mahogany and bronze do not appear, all will be Mr. Alexander's mural work, even to the last square inch of surface on the walls. To a Pittsburger, who alone can fully comprehend the vastness of the Iron City's resources in metal productions, this group of murals is indeed captivating.

The various rooms devoted to art gallery purposes, are among the leading and highly entertaining sections of the institute. On the second floor, are three galleries to be used for the annual loan exhibit of paintings; these have a floor space of 25,000 square feet. On the third floor are galleries provided for the permanent collection of pictures. These galleries have 3,000 lineal feet of wall space, and afford room for three pictures high, on the walls, on an average. This hall of permanent exhibit is 50 by 150 feet. The art department of the institute had its origin in the desire on the part of "various learned societies of Pittsburg" which applied for room in the original library building in 1895. Their request was granted and slowly the collection of fine productions was made. When Mr. Carnegie took a hand in the matter it grew rapidly and now contains many hundreds of beautiful paintings, to which are being added annually many more. Some of them are from master-painters in foreign lands, for be it remembered that in all things good this institute affords the best. From this small beginning, Pittsburg is rapidly advancing as an art center in this country.

Art galleries in our great cities have done much toward developing American art and Mr. Carnegie's effort in Western Pennsylvania, has been its most potent factor. After donating a goodly sum for art purposes, when he founded the original Pittsburg library, Mr. Carnegie added a greater sum to be paid annually for such purpose, as will be seen by a clause in a deed of trust issued by him in New York City, dated March 2, 1896, which reads as follows:

That I will annually, hereafter, and upon the payment to the treasurer of the board of trustees of the Carnegie library of Pittsburg of the sum of $40,000, or more, by the city of Pittsburg, for the support of said library building, pay to the treasurer of the said Carnegie fine arts and museum collection fund, the sum of $50,000, as above provided.

The only restriction placed on the expenditure of this sum by the trustees was that "it should be expended for the benefit of the masses of the people." After he had already endowed the department of science and fine art with one million dollars, this perpetual, annual gift, was indeed princely. It has been bearing good fruit ever since. At the 1907 international exhibit of paintings here, there were five hundred and twenty-five pictures displayed representing the best talent of the world. Of late years the permanent collection of paintings has grown rapidly, and is beginning now to cause the most flattering comment among art circles of Europe as well as of this country. One of the stipulations made by Mr. Carnegie was that at least two fine American pictures should be added annually to this collection. The first to grace the walls of the art hall was "The Portrait of Sarasate," by Whistler, one of America's greatest artists. Each year here are assembled a truly representative collection of works in art, making art studies possible from subjects produced by living master painters of all countries on the globe. European artists aver, that at these annual exhibits, the most practical and comprehensive views of modern art can be found. Advisory committees representing the Carnegie Institute, meet in London, Paris, Munich and the Hague, to select and review paintings for this exhibition, and then such pictures are passed upon by a majority vote of the celebrated painters, composing a jury. Two of their number come to Pittsburg on Founder's Day, and meet with eight from America to finally award prizes.

The immense free library rooms, the parent department of all the institute, are the home of one of the most extensive free public libraries in this country. The circulating department is on the first floor, while the reference department is on the second floor; both are models of modern library rooms. Unique features in this library are the eleven-story airtight bookcases, where are shelves sufficient to store about three-quarters of a million octavo volumes. It is constructed of iron, marble and glass. The vacuum cleaning system employed throughout the building, prevents the dust from ever collecting there. This "stack," or case contains over 20,000 feet of floor space. The library does its own printing and book-binding. This splendidly equipped plant is in the basement and has spotless glazed tile floors and enameled brick walls, which admit of no ink stains, or dirt. Here all the printing of the vast numbers of reports, circulars, the rebinding and repairing of the books used in the library, and other work of the institute is carefully executed.

The library is divided into the following seven divisions: General reference, adult circulation, technology, children, cataloguing, book orders and printing and binding. There is an art department connected with the library; this was donated by the late J. D. Bernd. The children's reading rooms are indeed interesting to visit, equipped as they are with small, easy chairs and handy tables. Children, who cannot read a word, go in crowds to this department. They are entertained by professional story tellers, who edify them by the hour from the poetic and prose legends and other rare gems from

the shelves. In the library proper, are to be found six million cards, each containing the most minute description of books within this library, or of books in libraries in other parts of the world, with which this method will put the student in communication. There is also a large, well lighted reading room for current periodicals and newspapers. In the technical department, a person in quest of information only needs to telephone regarding some doubtful question in science or mechanics, or a phase in chemistry, and by the time the inquirer arrives, his books, on the subjects desired, are in waiting for him, with page reference as to the point in question. This is an almost daily occurrence in the library. A complete set of the United States patent office reports fill one side of the reference room and save the Pittsburg artisans many a trip to the national capital. The library is also replete with British, German and French patent reports.

The selection of Edwin H. Anderson, in 1895, as the first librarian, was fortunate, for he developed one of the best library systems in this country. He was succeeded by Anderson H. Hopkins, who has helped to make the institution what it is today. In the roll of department heads, none are more thoroughly appreciated by the patrons of the reference room, than Miss Elisa May Willard and Harrison W. Craver, the former reference librarian, and the latter technology librarian.

During the year ending April, 1907, there were over twelve thousand volumes worn out by use in the central library and branches, which is a great test as to the public appreciation of literature and the frequency of its use. That more than one thousand books are worn out each month, by the clientele of one hundred thousand persons, is evidence that this library is doing the great work for which its founder expended his many millions. The subjoined extract from the monthly bulletin of the library, will show something of its standing in April, 1907, in comparison with 1895 when first opened:

In 1895 it opened with a collection of 16,000 volumes, while it now contains 250,000. Its circulation has reached 762,000 volumes per annum, and the total number of books and magazines circulated and used in the reading rooms in 1906 was 1,463,207. It has more than 100,000 borrowers and has added within the last year, 44,605 volumes. Its agencies—central and branch libraries, deposit and call stations, school stations, home libraries, reading clubs and the like—numbered one hundred and seventy the past year, all established and maintained by the city of Pittsburg.

In 1895, there were sixteen persons employed in the library and during the first year, its circulation was 115,394 books. The yearly reports show a gradual increase in interest taken. At this date (1907), one hundred and forty persons are employed in the system, and the circulation for this year will approximate a million volumes. During the last year it has conducted twenty-nine "home library groups" and fifty reading clubs for boys and girls, living in remote districts. It has sent sixty-six collections of useful books to schools, besides providing several play grounds with small circulating libraries. The

activities in all departments continue to increase. The number of books purchased in the last year was almost 43,000, fourteen thousand more than were ever added in one year before. The number of books circulated in 1906 was more than fifteen per cent. greater than for the previous year.

In addition to the central library, Mr. Carnegie's gifts have covered the splendid branch libraries located at Lawrenceville, opened May 10, 1898; West End branch, opened January 31, 1899; Wylie Avenue branch, opened June 1, 1899; Mt. Washington branch, opened May 31, 1900; Hazelwood branch, opened August 16, 1900, and East Liberty branch, opened October 10, 1905. These are each provided with excellent structures, all fire-proof and modern in construction. These places, in addition to the central library, and the more than one hundred distributing stations for books in Allegheny county, furnish the people whom Mr. Carnegie intended to benefit, with ample reading matter, from the youngest child up to the most scholarly adult, found in any of the professions, even the scientific and technical student. It is not an uncommon sight in this library to see a half dozen young men, students from the technical schools, feasting over books at one table; a clergyman gathering religious statistics from ponderous volumes; a company of lawyers gleaning information on some special subject, with which to strengthen their case at bar; scientists delving into rare works; teachers informing themselves in their profession, and the general reader of history, romance and fiction, grouped at other tables, all bent on gaining more knowledge from the manifold books found here and this without money and without price.

This library department has established a training school for children's librarians, which is the only one in the world. They have not waited for children from poor and humble homes to seek the library advantages, but they have gone out into the by-ways and alleys and besought them to improve their spare hours in reading good books. They have organized children's reading clubs which have proven very helpful and at the same time have kept the girls and boys busy who would otherwise have been walking in the ways of vice and learning evil habits.

The equipment of the Carnegie institutions is the very acme of modern mechanism. It has a wonderful system for heating, lighting and ventilating. So intricate is its construction that none but those familiar with technical work can comprehend it fully. It has the distinction of being the most extensive plant ever installed in any building in the world. This heating plant cost $640,000. The boiler house is detached from the main building, being situated in Junction ravine, three hundred feet distant, the power being transmitted to the engine rooms in the institute's basement. The power required is tremendous, propelling as it does, machinery producing thirty thousand electric lights; power for over five hundred horse power in motors, and steam for heating an interior volume of fourteen million cubic feet. The mechanical equipment includes heating, ventilating, electrical generating, refrigerating, elevators, vacuum-sweeping and compressed air apparatus. It also furnishes steam for cooking in the kitchen and dining rooms attached to the institute,

a feature which is kept up for the employees, as well as for operating the bookbindery and printing presses. Mechanical ventilation is most extensively used. Fresh air is supplied by nineteen centrifugal blowers, the air being drawn in from without and distributed throughout the whole structure. There are 333 thermostats which provide an automatic regulation of the temperature of the building. Another remarkable feature of the heating mechanism is that each piece is duplicated, so that under no ordinary circumstances can the institution become crippled for light, heat, ventilation or power. The building contains nearly two hundred miles of wire of various sizes and for various purposes, mostly for electrical uses.

The dedication of the new institute building in April, 1907, was the greatest event in the history of the institution, and was attended by many hundreds of American and foreign dignitaries, representing the arts, sciences and learned professions of nearly all the enlightened nations of the world. The annual exhibit of paintings in the art gallery was never nearly so large as at that date. It was upon this visit to Pittsburg, that Mr. Carnegie added his large gift for the further extension of the technical school. Eminent scholars from all over the world were in attendance, and every department of the great educational institution was ablaze with its best efforts. Mr. and Mrs. Carnegie reassured the trustees of the institution, that they had never for an hour, regretted the money which had been so lavishly donated in founding the now highly prosperous institution. At the hour appointed Mr. Carnegie marched from the Schenley hotel, between lines of cheering technical students, accompanied by a delegation composed of representatives from Germany, Great Britain, France, Belgium, Italy, Nicaragua, Costa Rica, San Domingo and Canada. The ceremonies were without formality, purely democratic in character. Germany was represented by an address from Theodor Von Mœller, minister of state, and France by Baron d'Estrounelles de Constant, member of the senate. A letter from President Roosevelt commending the character building work of Mr. Carnegie, and the founder's speech itself, were well received. The awarding of the prizes for the three best pictures in the international exhibit and the concert by the Pittsburg orchestra, lead upon that occasion by Sir Edward Elgar of England in the evening, climaxed a program that touched upon all the arts. Mr. Carnegie had not seen or visited the institution for several years and so well was he pleased with all connected with the Institute, that he remarked that "this is happiest day of my life," and no one, judging from his pleased expression, doubted the statement. On being introduced to the audience at the music hall, he spoke in an extempore manner in the following words:

Mr. President, honored guests and ladies and gentlemen:— Since my arrival in Pittsburg yesterday and since I entered this building, I have been in a dream. When I first began to attempt to see all of its beauties and wonders yesterday, I seemed to fall into a dream, and today I seem to be dreaming still. I must be dreaming for I cannot realize how else all this could have come to pass.

There must be some defect in me, for I cannot realize that all I have seen and all that is taking place today is actual. I came to see this place yesterday with Mrs. Carnegie and, as we looked at the wonders that have been accomplished and the miracles of beauty that have been wrought on every hand, I told her that I simply could not believe it; it seemed as though Aladdin and his lamp were facts, and not fairy lore, and some good genii had been at work. "Yes, and we didn't even have to rub the lamp," replied my wife. And that is what so mystifies me—this very fact that I had so very little actually to do with bringing all this about. I experienced the same inability to realize the situation when I walked over the moors and lochs and mountains at my other home in Scotland. I could not believe that such a man as I could actually own a mountain or miles of heather. When you come to think of it, it seems impossible for anyone to own such a grand thing as a mountain or lake. And so it is with a splendid institution like this.

They tell me I had something to do with it, but I can't realize it. True, I remember of giving to Mr. Franks [his secretary], a note in which I told him to honor all the drafts for this building, and I am told they were paid. But it is the same with the bonds, which they tell me I own. I have never seen them yet. Mr. Franks says he has them and I suppose he has, and that they helped pay those drafts, but so far as I know, I have just as many bonds as I ever had. But that is all, and that is why it is impossible for me to feel about this, any sense of ownership, or realize the extent of the gift, if I may call it such. I don't feel a particle the way they say I do about it. It justs seems impossible that I could have had anything whatever to do with it, and still I believe that it is all a dream. And with your permission, ladies and gentlemen, I will continue to dream.

Mr. Carnegie then briefly sketched the history of the institute, referring to the various departments and those in charge of them. During his remarks, he said:

Eleven years ago standing here, I handed over the institute to Pittsburg, then a bold experiment, a combination library, art gallery, museum and hall of music, never, so far as I know, having been attempted before.

What we do for ourselves is more stimulating than what others do for us. In this case Pittsburgers knew that I was one of themselves, for here it was that fortune came to me, and it is as a Pittsburger I have labored for Pittsburg. This institute is built by a Pittsburger with Pittsburg money for Pittsburg. You all know the beneficent results which followed.

Not desiring, in the least, to take credit to himself, Mr. Carnegie emphasized strongly the point that Pittsburg had co-operated with him to bring about the grand results obtained. He said:

These proofs of genuine Pittsburg co-operation are the sweetest of all rewards, for they enable me to dwell upon the fact that I am not alone in this work, and at intervals they whisper to me "you have Pittsburg with you," delicious music that goes to the heart and makes me happy.

There is room for many things of the spirit in our city. Things material are abundant. Our mills and factories are numerous, large and prosperous, but things material, including money itself, should only be the foundation upon which is reared things spiritual. Our mines of coal and iron have not completed the mission when transmuted into articles for use, and these into dollars. All is on the material plane. Not till the dollars are transmuted into

service for others in one of the many forms best calculated to appeal to and develop those higher things of the moral, intellectual and esthetic domain, has wealth completely justified its existence. Dollars are only dross when unspiritualized; a means to an end, and miserable is the man, mean and squalid his life, who knows no better than to deaden his soul by mere possession, counting over the hoard which holds him down, or using his facilities in old age in augumenting the useless stuff which ministers not to any taste worthy of man.

There is surely to arise from this wealth created here, a body of men who will find in the distribution of their gains where they were made, the genuine reward which surplus wealth can give, the knowledge that it is certain in after years to elevate, refine and purify the lives of those to succeed us, and that we have left one spot, at least, a little better than we found it.

Another feature of the dedicatory services was the lengthy address which in manuscript form was read by Mr. Carnegie, in which he more specifically reviewed the history of the institute, and paid a high compliment to the heads of the various departments, and the board of trustees, officers, etc. If at any other time, there had been doubts as to the effective speech-making qualities of Mr. Carnegie, his efforts on Founder's Day, 1907, when the extension of the institute was dedicated, this was certainly dispelled. He may not be an orator in the general sense of the term, but he is a philosopher and having been a life-long traveler, a reader and a thinker, his mind is stored with facts and well digested opinions. From this abundant storehouse, he talks with perfect ease. While he makes no efforts to be graceful, there is an earnestness, a strength, a grandeur about his style that is far more effectual than the finished speech of the polished orator.

That the interest in the library is ever widening and deepening is to be seen by the ratio of books circulated in the eleven years that have passed since it was first opened to the use of the public. The subjoined shows the books circulated from this library each year from its foundation to the present time:

Circulation in 1896.....	115,000	Circulation in 1902.....	522,000
Circulation in 1897.....	119,000	Circulation in 1903.....	607,000
Circulation in 1898.....	175,000	Circulation in 1904.....	645,000
Circulation in 1899.....	345,000	Circulation in 1905.....	661,000
Circulation in 1900.....	428,000	Circulation in 1906.....	762,000
Circulation in 1901.....	488,000	Total Circulation....	4,167,000

The number of publications catalogued in this library and its branches in 1906 was as follows:

Central Library	148,498
Lawrenceville Branch	22,209
West End Branch.....	13,610
Wylie Avenue Branch.....	24,679
Mount Washington Branch	13,070
Hazelwood Branch	14,087
East Liberty Branch.....	14,423
Total	250,576

The following may be said of the various Founder's Days of this institute:

In 1897 President William McKinley was present and made the chief address. His wife accompanied him and they were the guests of the city. His speech was replete with words of praise for the institute and Mr. Carnegie, who was not permitted to be present on account of ill health, but was in his home in Scotland, sending his regrets.

In 1898 Mr. Carnegie was present and well pleased at the work of the of the institute up to that date.

In 1899 President Hadley of Yale College made the principal address. Thousands upon thousands visited the annual display of paintings at the art gallery. The paintings that year were of cheerful subjects and appreciated for their bright color. The first prize was awarded to Miss Cecilia Beaux, of Philadelphia. The painting by which she was successful was entitled: "Mother and Daughter." She received a gold medal and a prize of $1,500. Mr. Carnegie sent a letter of congratulation to the institute from Scotland, the closing paragraph of which read:

We are delighted to know that the grounds for the addition have been secured. This only marks a step in the growth of the Institute. What it will one day become no one can tell. It will be grander than anything we can permit ourselves to believe today. In this glorious hope let us continue to labor in the future as in the past, for the harvest of good fruits which it has yielded in abundance so far. Always truly yours,

ANDREW CARNEGIE.

In 1900 Mr. Carnegie was permitted to be present. Twenty thousand people saw the art exhibit and the founder told the people of his design in establishing a technical school. Among the prominent men present was the veteran actor and dean of the American stage, Joseph Jefferson, who made clever remarks.

In 1901 ex-President Grover Cleveland was present and delivered the main address. Joseph Jefferson was again present and had on exhibition one of his own paintings. The name of Mr. Jefferson's painting was, "As We Were Saying." Mrs. Grover Cleveland was present and upon expressing her great admiration for the actor's painting, Mr. Carnegie purchased it for $1,000 and ordered that it be sent to her, which was done at once.

In 1902 Mr. Carnegie was present and the orator of the occasion was Hon. Whitelaw Reid, who spoke on: "Our Government—Wherein Lies Its Greatness." Joseph Jefferson being again present gave a "Word of Parting," and no one who spoke was more kindly received than he.

In 1903 the ceremonies were deeply saddened by the announcement, by cable from Mr. Carnegie in London, that Mrs. Mary Schenley, the noted benefactress of Pittsburg, had just died. Mr. Carnegie sent these words of greeting:

Let us rejoice in the knowledge that we are to have one of the biggest buildings ever devoted to the public good, and that it will be free to all the people.

The address of the day was made by President Woodrow, of Princeton University.

In 1904 John Morley, the distinguished English orator, statesman and author, was the chief speaker and his address was a rare gem in literary finish and logic. Mr. Carnegie was not present upon this occasion.

In 1905 Melville E. Stone, at the head of the American Press Association, delivered the annual address. Mr. Carnegie was not in attendance.

The several Allegheny county libraries provided by Mr. Carnegie are as follows:

The Braddock free public library was the first library built by Andrew Carnegie, and was therefore the first Carnegie Library in the world. It was opened March 1, 1889, on historic ground, where, on July 9, 1755, the English army under Braddock was defeated, while on its way west to capture Fort Duquesne. Here a fine collection of historic relics and historical books of American and local histories, with other general reading matter, was provided by Mr. Carnegie, chiefly for the benefit of his workmen and their families, Braddock being the seat of one of his principal steel works and at that time, having a population of about 15,000. It soon proved too small for the readers, and in 1894 he enlarged it for the Carnegie club, and added a hall, or theater, swimming pool, billiard room, bath houses and card rooms, all under one roof. The tax-payers were not asked to contribute here, as in most of his library points, as this was largely for his workmen. The first librarian was Edward H. Anderson, who later had charge of his greater library work at Pittsburg. The reports for the earlier years at Braddock, give the following facts as to circulation, etc.: Circulation in 1891, was 50,000; in 1892, was 42,000; in 1893, 39,000; 1894, 49,000; and in 1895, it was 52,000. In 1900, the circulation was 78,142, while the number of books on hand was 17,000. For this library Mr. Carnegie donated in 1886 a fund, and in 1894 made the total amount $500,000.

The Carnegie library at Duquesne was opened May 14, 1904, and contains 15,000 books carefully selected, including two thousand for children. During the winter months there is an educational class in mechanical drawing, arithmetic and bookkeeping, English language, etc. The last named is of much importance, since there are so many foreigners in this borough. The building contains a fine pipe organ, the special gift of Mr. Carnegie, and on this, once each month, there is given an organ recital free to all. This library works in co-operation with the public schools, and has collections of books in nearly all of the rooms in the place, supplementing the regular studies. The building is after the type of most of the smaller Carnegie libraries, and is complete in every appointment. It has a swimming pool, gymnasium and billiard rooms.

Mr. Carnegie also established a library at the borough of Carnegie, the corner stone of which was laid October 19, 1899. Hon. John Dalzell was the orator on that occasion. The following cablegram was sent from Mr. Carnegie:

CARNEGIE FREE LIBRARY CLUB HOUSE; BRADDOCK, PENNSYLVANIA

The Oldest Carnegie Library.

Kirkcalsy, Scotland, October 12, 1899.

J. D. Glover, Carnegie, Pa.

Hearty congratulations upon the laying of the foundation stone of hall and library of my namesake, whose future seems so bright. Shall do my best to prevent it ever being ashamed of its name.

ANDREW CARNEGIE.

The first book taken from the shelves of this institution was Mr. Carnegie's "Triumphant Democracy." The building was dedicated April 22, 1902, with Mr. Carnegie present to speak. The library cost its donor $250,000. It stands upon a high eminence, overlooking the borough of Carnegie. It is a fine structure and includes a splendid music hall. This library was to be kept up by the borough and for various reasons, mainly lack of sufficient funds, or rather a lack of appropriating such funds, the history of it does not show the great success found in all of the other Carnegie institutions within Allegheny county. The first installment of books was about five thousand volumes, to which has been added, making the present number 8,247.

The Carnegie library at Homestead is a very successful one. It is on the hillside overlooking the Homestead Steel Works, with a commanding view of the Monongahela river, curving around steep, wooded hills on its northern bank. This was originally planned for Mr. Carnegie's workmen and their families. The material is Pompeian brick, its exterior dimensions being 133 by 288 feet. It is built after the French renaissance style and contains three separate divisions—music hall, club rooms and library. Its auditorium seats 1,200 persons. In the basement is a swimming pool and bowling alleys. The recreation room is provided with ten fine billiard tables. The second story and roof space are taken up by a modern gymnasium. The book cases are solid oak with glass doors, and have a twenty thousand book capacity. The main foyer has the yellow Verona marble walls, the ceiling, which is beamed in plaster, being of a harmonious color. The vaulted and domed ceiling of the hall itself is formed of deep beams of ivory with grayish panels. This like all of the Carnegie buildings is provided with a fine toned pipe organ. The structure is fire-proof and the interior is of quartered oak. The building is thoroughly heated by steam and lighted by electricity. This institution was opened for the use of the public in August, 1898, and has been successful from that date. Taking twenty other institutions of this class serving the same number of people, the average number of volumes circulated is 131,000, while the Homestead library circulates 177,000 volumes. According to the last report of librarian W. F. Stevens, there are now thirty thousand volumes of choice books within this library. The circulation in 1906 was 177,627 as against 143,450 the year before.

Another, and by many considered the greatest feature of this institute, is the technical school department, which has been added to the original conception of the liberal founder of the institution. This is indeed a wonderful and unique institution of itself. It is in accord with the general plan of the government of the whole institution, whereby each division retains its identity and

is governed by its own directors, yet it forms a part of the whole. It is one of the most unique in America, and has no parallel in the world. There are other large and well kept libraries, other musical and artistic institutions, many of them older; other museums possessing rare collections and many technical schools, perhaps as wide in their scope, but no where can be found in the world these departments all combined in one complete institution. It was in April, 1905, that ground was first broken for the foundations of these buildings. At first Mr. Carnegie donated one million dollars for the buildings of this school, and endowed it with two million dollars more. At an expense of $350,000 the city of Pittsburg provided the necessary grounds. In April, 1907, there were sixteen hundred students enrolled. Ninety instructors were connected with the faculty, and six thousand students were on the waiting list, longing for an opportunity of gaining admission. So pleased was Mr. Carnegie with this branch of the institute, that when in Pittsburg to attend the dedication of the new building—Founder's Day, 1907—he made it public that he would give one million dollars more for an extension of the technical school, and still another million dollars to be added to the endowment fund, as soon as the new extension should be completed. It has been known for sometime that if Mr. Carnegie has any one hobby, which he cherishes more than another, in all of his stupendous gifts, it is this technical school, seeing as he does the great and lasting good he is bestowing upon the young people, who will within the passing of coming generations receive a liberal education through this medium.

The buildings occupied by the technical school are located across a deep ravine from the institute and library, proper. They stand on a tract of land facing Schenley park. While this school is but in its infancy, the foundation of its buildings having been laid in the spring of 1905, the following departments have been established:

School of applied science, offering day and night courses in civil, mechanical, electrical, mining, metallurgical and chemical practice.

School for apprentices and journeymen in the building and manufacturing trades—day and night courses.

School of applied designs—architecture. Also the Margaret Morrison Carnegie school for women and girls, training them for home work and distinctively for women's trades and professions. This department was founded and named in tender memory of Mr. Carnegie's mother.

Mr. Carnegie being a thoroughly practical man, sees the education of young men and women from a practical standpoint and in establishing this, the greatest of American technical schools, he has spared neither means nor thought, but held strictly in view the needs of the future as well as the present generation. It was founded by Mr. Carnegie as a protest against much of the inferior and useless education afforded by many of our American schools. He does not believe that unless the student is preparing to enter one of the learned professions, much time needs be spent in acquiring a knowledge of the classics.

When the English scholar and poet, Matthew Arnold, said in his hearing that, "no man could write good English without a knowledge of Greek and Latin," Mr. Carnegie answered him by asking if Shakespeare and Burns had not written at least reasonably good English?

Mr. Carnegie in a letter to the mayor of Pittsburg made the offer to furnish the money to build and equip a technical school in Pittsburg, to be used by both sexes, with the provision, only, that the city should provide a suitable site, ample for future extension. This offer was accepted January, 1900, when he generously increased his endowment from one to two million dollars, upon which the trustees of the institute adopted the following resolution:

Resolved, that the board of trustees, for themselves, and on behalf of the city of Pittsburg, hereby express their highest appreciation of the philanthropy of Mr. Andrew Carnegie, especially as exhibited in the additional proofs of his unbounded esteem for the city of Pittsburg. And they rejoice with him upon the civic benefits which flow continuously from the development of his wise purposes in the community.

The year 1902 was largely spent in selecting a site, and in February, 1903, the thirty-two acre tract was secured, adjoining Schenley park, about two blocks from the Carnegie Institute and Library. The location is almost the exact center of the city of Pittsburg and is one of rare natural beauty, being upon an eminence, at once cheering and picturesque. It has a frontage of nearly half a mile along the park which contains several hundred acres. The present buildings are of white brick, having a frontage on the park of eight hundred and forty feet. The architecture of the buildings admits of ample light and ventilation, with easy access from one room to another, by means of wide corridors. Other spacious buildings are being constructed at this time.

The school opened October, 1905, and now has fifty thousand books on technical subjects, and access to 250,000 other books in the Carnegie library, near by. It is equipped with a power plant of 1,200 horse-power. The buildings now cover 100,000 square feet of area which will be more than doubled by the extension now planned and being built.

In the autumn of 1907, there were two thousand students of whom about 350 were women. The average age of the students upon entering the day course for men and boys, is (in 1907), nineteen years, while that of the night course for men is twenty-four years and two months. The youngest age at which a student may be admitted is sixteen years. The tuition varies in the different courses, but generally speaking, the fee for all residents of Pittsburg, is $20 for the day courses, per year, and $30 for those from all other places. The tuition for the night courses, is respectively, $5 and $7 per year. It was Mr. Carnegie's special request that the tuition should be made small, but that it should never be free, lest the student should be taught in early life to accept charity. On one occasion he said to the writer, "I am delighted to assist those who help themselves and none others should be helped." This is the guiding

star of all of his benefactions—that those who are assisted should bear a small part, at least, of the expenses.

The technical school is divided into the following distinct departments, each having for its purpose the education and training of students for specialized vocations.

The school of applied sciences offers a technical course for the training of students in engineering and has day and night and preparatory courses. The three years' course includes chemical and metallurgical practice, civil, electrical, mechanical, and mining engineering practice, etc. In this course the student must possess some natural aptitude for a technical or scientific career and must pass an examination in English, algebra and chemistry.

The school of applied designs gives training in art and design, as applied to the industries, and includes a course for day students and night students. Here is taught architecture, free-hand drawing, history of architecture and ornamentation of buildings, English and economics. The entry requirements are a good common school education.

The school of apprentices and journeymen has a course of instruction in the manufacturing and building trades, with a full industrial course. Here one may learn machine work, pattern making, blacksmithing, forging, foundry work, plumbing, bricklaying, sheet metal work, electric wiring, etc., etc. The requirements for entrance are a good common school education.

The Margaret Morrison Carnegie school for women offers a course of special instruction to women for the home and various industries and professions open to women. This course is planned to develop the womanly attributes and give a foundation on which to build a career in distinctly feminine fields. Its emphasis is chiefly laid upon the home which is esteemed the important, logical sphere for educated women. Here is taught secretarial work, household arts, technical dressmaking, costume designs, millinery, tailoring, applied designs, art work on stained glass, leather, pottery, etc. The entry requirement in this course is a knowledge of English, mathematics, and a general information, as shown by an examination. Stenography, sewing, cooking, bookkeeping and office work are also taught. Both day and night schools are provided for women as well as men.

Dormitories are provided for such students as come from abroad and desire them, the rate for board and lodging being from five dollars per week up.

In the interior of this beehive of training, there are many complete workshops—the machine shop, with its many iron and wood turning machines; its drafting and pattern rooms, and the handiwork of the more advanced students. In other departments, one sees young painters at the easel painting business signs of plain and ornamental design. The whiz and whirl of machinery, and the quiet rooms for study, form a scene beyond the comprehension of those who have not visited such a school. At the school for women, one may see the young girls being instructed in arts and workmanship, which will tell in the

offices, parlors and kitchens of the future. Really, it is not to be wondered at that the founder speaks of this school as his chief "hobby."

But recently, a hospital—in fact two of them—have been added to the technical schools. The purpose of these is to make provision for emergency cases and accidents. The first aid to the injured or ill is illustrated at these places. A suite of rooms has been set apart in the hall of applied sciences, where students who have been injured in any way, or become suddenly ill, can be cared for and treated with every appliance known to advanced medicine and surgery. In this department lectures and instructions on simple surgery and on hygienic and physiological subjects, accompanied by demonstrations of what should be done in cases of injury, are given.

Owing to misleading statements made from time to time by the press of the country as to Mr. Carnegie's benefactions to Pittsburg, the following figures were obtained from the great philanthropist himself on Founder's Day, April 11, 1907, and give a summary of them to that date:

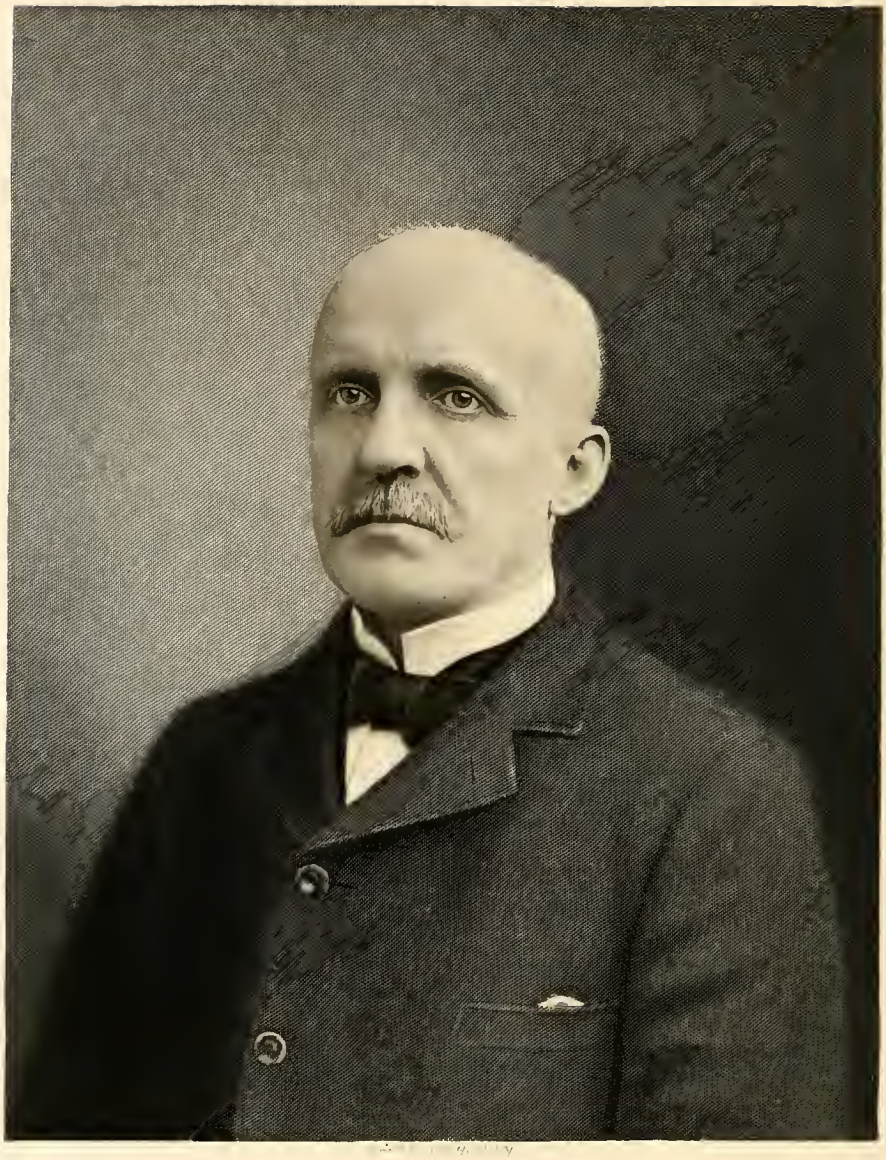
Original Building	$ 1,000,000
New Building	5,000,000
Endowment for Institute	10,000,000
Technical School Buildings	4,000,000
Music Hall, Statuary for Art Gallery and Branch Libraries, in Pittsburg	1,000,000
Total	$21,000,000

To obtain the total amount of his gifts within Pittsburg and adjacent towns there should be added to the above list, that of $2,000,000 for the free libraries at Braddock, Homestead and Duquesne; $280,000 for the Allegheny City library; other borough libraries, church organs, etc., $3,000,000, and the $5,000,000 generously given as a "Pension Fund" for the steel work employes, making a grand total of $31,280,000 at this writing in December, 1907.

Men build monuments unto themselves, sometimes, and Mr. Carnegie has truly erected one to himself in Pittsburg. It will ever keep his memory green in this city where the labor and genius of his youth found their first arena, and where they were crowned with a wonderful measure of success. Wallace Bruce, the Scotch-American poet, of New York City, after a visit to this library in 1896, when it was but a fraction of its present size, wrote the following lines, presenting a copy to Mr. Carnegie and filing one in the library:

You have wrought a noble poem
In your home of early years—
Aye, a proud, prophetic poem
In the land of peerless peers!
Cold the lines that fall and falter
Since the bard of Colla passed;
Fruitless offerings on life's altar;
But your work abideth fast.

Ah, to wake the coming ages
Idle wish of many a seer,
Dead the tomes of weary sages,
But your note shall linger clear.
Hark, beneath yon swelling arches
Knowledge, skill and hope enchime
As the long procession marches
To the grandest song of time.



S. A. M. Clung

CHAPTER XLII.

The Present City of Pittsburg—Table of Population From 1790 to 1900.

Most of these pages have been written while Pittsburg and Allegheny were separate municipalities, though the proceeding was pending which eventually resulted in their union. Historically they have throughout this work been almost invariably considered as one city. Divided by but a narrow river which has long since been spanned by almost a net work of bridges, their social and commercial interests have all these years been practically the same. That their municipal union has been so long delayed under these circumstances was strange indeed, and was due to causes which need scarcely be repeated or remembered now. Pittsburg, we think, has always been underestimated because of its limited population as given by the census reports, which included only the old city south of the Allegheny and Ohio rivers.

Efforts to unite these cities were put forth and the matter was advocated more than sixty years before their union was finally accomplished. The *Commercial Journal* of April 6, 1846, says that "within a day or two we have heard the project of consolidation repeatedly broached by the citizens of Allegheny. The advantages of such an arrangement are obvious, and have been at former periods urged through the *Commercial Journal*. Why should not some steps be taken to procure an expression of public opinion upon the subject? How would it do to call a public meeting? We have heard such a course suggested." Nothing definite was done at that time. The scheme was generally opposed by Allegheny and its advocacy for many years did little else than to engender a bitter feeling between the two cities most deeply interested. Early in 1854 the question was taken up with much earnestness. The consolidation idea had been revived by the building of turnpikes and railroads which connected the cities and by a demand for free bridges. The cities and surrounding boroughs were both increasing rapidly and many thought a union would be advantageous to all interests. A bill was introduced into the Legislature in the early part of 1854, the purpose of which was to consolidate Pittsburg, Allegheny and the surrounding boroughs. It came up for final passage but met with great opposition from every source except from Pittsburg. It was therefore defeated, but the scheme was not abandoned.

In the following December the Board of Trade took up the matter and appointed a committee to investigate it and make a specific report. Consolidation was a more simple matter then than now, for the rule which forbade the passage of special legislation had not then been written into the organic law of the state. A barrier at that time was the limited park system of Pittsburg, for the city had practically nothing which could be called a park, while Allegheny had had from its foundation a system of commons which the average citizen saw could one day readily be converted into beautiful parks. This was brought out by the report of the committee which was made to the Board of Trade in April 1855. The debt of Pittsburg was then $1,136,624, while that of Allegheny was but a few dollars less than half a million. The little boroughs of Manchester, Duquesne, Lawrenceville, Minersville, Birmingham, etc., all of which were then separate organizations and included in the scheme of consolidation, had unitedly a debt of less than $50,000. The total indebtedness of the cities and boroughs amounted to about $1,685,000, and in proportion to their population and property value it was not unequally divided. But added to this was the railway indebtedness, then about $2,200,000, swelling the whole indebtedness if a consolidation was effected to the then enormous sum of $3,886,000. It was urged that Pittsburg's main desire was to secure assistance in the payment of its immense debt. The report of the committee favored a consolidation, urging that many small office expenses would thus be obviated; that the entire debt being assumed by the cities and boroughs united could be refunded at a much lower rate of interest, saving, they thought, at least ten per cent. of the annual interest then being paid, and that the larger city composed of the aggregate population and wealth would have much greater strength and credit abroad. But these arguments, though they were all logical, could not overcome the opposition which the project met with from most citizens who were not strictly residents of Pittsburg. The scheme of consolidation was therefore abandoned and but little was said of the matter until the adoption of the Constitution of 1873, after which it became impossible to unite the cities except by a general law, applicable alike to all parts of the state. Nevertheless the question of a union between Allegheny and Pittsburg was almost constantly advocated. The long agitation finally culminated in a bill before the Legislature in 1895, which was advocated and pushed through largely by the efforts of the late Christopher L. Magee. It became a law on May 8, 1895. This bill would have enabled Pittsburg to annex all contiguous boroughs, and its operation would doubtless have saved a great deal of expense and trouble. But the opponents of the bill carried the matter to the Supreme court which declared the bill unconstitutional and this ended it. Another bill providing for a consolidation, though by perhaps less objectionable measures, was passed by the Legislature of 1905, and it met with the same results when finally reviewed by the Supreme court of the state.

On November 11, 1905, the governor of the commonwealth issued a proclamation calling for a special session of the Legislature to meet at Harrisburg on January 15, 1906. Among the subjects designated by the governor in the proclamation to be considered during the extra session, was to provide a means for the consolidation of Pittsburg and Allegheny. The matter of the preparation of a bill that would meet the requirements of the occasion and at the same time conform to the law as laid down by the Constitution, was taken up at once by the Chamber of Commerce. Mr. David T. Watson and Mr. George W. Guthrie were secured to draft the bill. On January 9, 1906, the governor issued an additional proclamation which more fully covered the question of the annexation of Allegheny to Pittsburg. At the time appointed the Legislature met and the Watson-Guthrie bill was introduced on January 16. The bill was passed and finally became a law on February 15. According to the terms of the bill, the mayor of Pittsburg filed a petition in the Court of Quarter Sessions on February 17, for for the annexation of Allegheny. This matter was heard before Judge Samuel A. McClung. In the meantime a committee known as the Public Defense Committee was appointed in Allegheny, and this committee, by its attorneys, filed exceptions to the proceedings on March 7. They raised the question of the constitutionality of the bill and asked for a dismissal of the petition. The answer of the mayor to these exceptions practically admitted the allegations of fact but denied the conclusions drawn from them. This was filed on March 10. On March 15 the matter was heard by the court, and on April 25 the exceptions were dismissed. On April 30 Judge McClung ordered that an election as provided for in the bill be held on June 12. On May 2 exceptions to the order of the court in sustaining the petition and dismissing the former exceptions were filed. The election ordered by the court was held on the day appointed in both Pittsburg and Allegheny, the elector being asked to vote for or against consolidation. The result of the vote was as follows. In Pittsburg 31,117 votes were cast for consolidation and 5,223 against it. In Allegheny 6,747 votes were cast for consolidation and 12,307 against it. The total vote was therefore 37,864 in favor of consolidation and 17,713 against it, which showed a majority of 20,151 in favor of consolidation in the two cities. These votes were tabulated by the judges of the courts of common pleas on June 14, and on June 16 the court ordered that Allegheny be annexed and consolidated with the city of Pittsburg. Exceptions were filed and dismissed, whereupon an appeal was taken to the Superior Court, and the appeal was ordered to operate as a supersedeas. The matter was argued before the Superior Court on October 1, and on November 19 the court handed down an opinion sustaining the court below in holding that the act was constitutional. From this decision an appeal was taken to the Supreme Court of the state. On March 11 the Supreme Court affirmed the decision of the Superior Court. An application was then made by the opponents of annexation to Justice Wm. H. Moody, of the United States Supreme Court, who, on March 19, allowed an appeal from the decision

of the Supreme Court of Pennsylvania to the United States Supreme Court, and pending this hearing, all proceedings under the law were suspended. A motion was made by the attorneys favoring annexation to have the appeal dismissed, but after hearing the argument the appeal was allowed to stand, and October 18, 1907, was fixed for a final argument of the case. The argument lasted three days, viz., October 18, 19 and 21. The annexation argument was made mainly by Mr. David T. Watson, who had practically framed the bill, while the opposing argument was made in the main by ex-Governor William A. Stone. On November 19, 1907, the Supreme Court ended the long controversy by affirming the opinion of the courts below.

The authorities in Allegheny were unwilling to delay the annexation longer, and accordingly took every legal step possible to facilitate the consolidation. The final union took place on December 9, 1907. The bill provided that consolidated cities should take the name of the larger city and it was thus that the beautiful Indian name Allegheny was dropped and the new consolidation became known by the time honored name of Pittsburg.

Though a majority of the citizens of Allegheny were opposed to the project and fought it to the end, they did not take unkindly to it when it was at last an accomplished fact. For many years the citizens of Allegheny boasted of being Pittsburgers when abroad, and it is said they uniformly gave Pittsburg as their residence when registering even at near-by hotels. There were no large hotels, no newspapers nor no theaters in Allegheny, and its people were thus led to depend constantly on Pittsburg, and this perhaps induced them to take more kindly to the annexation. The day following the consolidation, two accomplished women were conversing in a large shopping house in Pittsburg, when one of them said to the other," You live in Allegheny, do you not?" "No indeed," was the reply, "I live in Pittsburg, North Side." Allegheny being on the north bank of the river, the city was by common consent given that name when they were united, and by that name, "North Side," it will probably always be designated.

The present city of Pittsburg has an area of thirty-eight square miles, extending in all directions around the Fork of the Ohio. This territory is solidly built up. It has an average population of fifteen thousand per square mile and it cannot therefore be said that rural communities have been added to the city. The population of Pittsburg in 1900 was 321,616, and that of Allegheny was 129,986, or 451,602 in all. The population of the two cities in 1890 was 343,904, showing an increase in ten years of 107,698. The percentage of increase during that decade was a fraction over 31.31. At the same rate of increase, the population on January 1, 1908, seven years and seven months after the census of 1900 was taken, was 558,812, and in 1910 should be 592,998. For the reason that both cities have been unusually prosperous in the last eight years, more so than they were in the preceding ten years, we believe that the population at the time of the consolidation, December 9, 1907, was fully 600,000, and we shall be greatly surprised if the population

of Pittsburg with one or two annexations now contemplated, does not exceed 700,000 in the census of 1910. In the meantime, in addition to that, several adjoining boroughs may be annexed which will still further increase these figures.

The following table gives the population of Allegheny county, together with the boroughs and cities, as shown by the United States Census Reports, for the twelve enumerating periods from 1790 to and including 1900:

YEAR	1790	1800	1810	1820	1830	1840	1850	1860	1870	1880	1890	1900
Allegheny County	10,370	15,087	25,317	34,920	50,087	81,235	138,290	178,831	262,204	355,869	551,959	725,058
Pittsburg	.....	1,565	4,768	7,248	12,542	21,115	36,691	49,221	86,076	156,389	238,617	321,616
Allegheny City	.....	.....	.....	.....	2,801	10,089	21,200	28,712	53,180	76,682	105,287	129,896
Aspinwall	.....	.....	.....	.....	.....	.....	.....	.....	384	915	.....	1,231
Avalon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	804	2,130
Bellevue	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,418	3,416
Ben Avon	.....	.....	.....	.....	.....	.....	.....	.....	1,200	3,510	8,561	15,859
Braddock	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Birmingham	.....	.....	.....	.....	520	1,554	3,752	.....	.....	.....	.....	.....
Beltzhoover	.....	.....	.....	.....	.....	.....	.....	.....	.....	564	.....	.....
Carnegie	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7,330
Coraopolis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	962	2,555
Crafton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,927
Chartiers	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,852	.....	.....
Duquesne	.....	.....	.....	.....	.....	.....	870	1,720	.....	.....	.....	9,056
East McKeesport	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	873
Edgewood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	616	1,139
Elizabeth	.....	.....	.....	.....	.....	.....	.....	.....	1,196	1,810	1,804	1,866
Elliott	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,545
Emsworth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	958
Esplen	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,364
Etna	.....	.....	.....	.....	.....	.....	.....	.....	1,417	2,334	3,767	5,384
Edgewater	.....	.....	.....	.....	.....	.....	.....	.....	380	.....	.....	.....
Glenfield	.....	.....	.....	.....	.....	.....	.....	.....	.....	538	718	905
Greentree	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	685	678
Homestead	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7,911	12,554
Knoxville	.....	.....	.....	.....	.....	.....	.....	.....	.....	303	1,723	3,511
McKeesport	.....	.....	.....	.....	.....	.....	1,392	2,166	2,523	8,212	20,741	34,227
McKees Rock	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,687	6,352
Manchester	.....	.....	.....	.....	.....	.....	1,755	2,707	.....	.....	.....	.....
Mansfield	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,172	.....	.....
Lawrenceville	.....	.....	.....	.....	.....	867	1,746	3,260	.....	.....	.....	.....
Millvale	.....	.....	.....	.....	.....	.....	.....	.....	668	1,824	3,809	6,736
Montooth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	706
Mt. Oliver	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,295
Mt. Washington	.....	.....	.....	.....	.....	.....	.....	.....	1,988	.....	.....	.....
North Braddock	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,535
Oakdale	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,147
Oakmont	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,767	2,223
Osburn	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	221	662
Ormsby	.....	.....	.....	.....	.....	.....	.....	.....	2,225	.....	.....	.....
Pitcairn	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,061
Port Vue	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,803
Sewickley	.....	.....	.....	.....	.....	.....	.....	795	1,472	2,053	2,776	3,586
Sharpsburg	.....	.....	.....	.....	.....	.....	.....	.....	2,176	3,456	4,898	6,842
Sheraden	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,948
Spring Garden	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	720	1,015
Swissvale	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,716
Rankin	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,775
Tarentum	.....	.....	.....	.....	.....	.....	.....	.....	944	1,245	4,027	5,472
Turtle Creek	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,282
Union	.....	.....	.....	.....	.....	.....	.....	.....	1,355	.....	.....	.....
Verona	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,599	1,477	1,904
Versailles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	870
West Elizabeth	.....	.....	.....	.....	.....	.....	.....	.....	590	838	719	744
West Liberty	.....	.....	.....	.....	.....	.....	.....	.....	.....	865	863	1,281
Wilkinsburg	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,693	11,886
Wilmerding	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	419	4,179

The census reports show that there were one hundred and fifty-nine slaves in Allegheny county in 1790, seventy-nine in 1800, twenty-four in 1810, and one in 1820, who was under fourteen years of age.

The city has now over 450 miles of paved streets. It has thirteen parks, containing nearly that many hundred acres. It has 115 school buildings, which are valued at $9,300,000, and these with 1,625 public school teachers,

afford the best of educational facilities to 64,166 pupils. The total valuation of the public buildings and grounds, not including the school buildings, is $40,500,000.

It is not strictly within the province of these pages to describe the city as it is at present, but rather to treat of the past and to lay before the reader the methods by which it achieved its present greatness. There is, however, a mistaken impression abroad that Pittsburg is engaged almost exclusively in the production of iron and steel, and a few words may not be out of place to show how far from the truth this impression is in reality. While Pittsburg is indeed the iron center of the world as has been shown beyond doubt in a former chapter, there are here carried on many other branches of manufacturing in which the city surpasses all other cities in the world.

The product of glass is one of the oldest of Pittsburg's industries, and though but little is now produced strictly within the limits of Pittsburg, a large part of the glass of the United States is produced by Pittsburg capital and within a few miles of the city, the operators having found it advantageous to locate their plants in near-by localities. The factories of Jeannette, twenty-seven miles east of Pittsburg, are the largest in the world. This town has the largest window glass factory in the world and the largest pressed glass concern in America. These, with other factories at the same place, produce, according to government statistics, more glass in various forms than any other factories in the United States. Scarcely less than these are the glass factories at Arnold, a few miles north of Pittsburg. All have their chief offices in Pittsburg, and were built and supported almost entirely by Pittsburg capital. In the Pittsburg district were produced last year $2,250,000 worth of plate glass, while the entire product of the United States, outside of this district was $7,978,253. The same district produced $5,000,000 worth of window glass, while all the rest of the United States produced but $6,-610,000 worth. The product of lamp and electric glass for the year was $3,-000,000, while the balance of the United States produced but $1,800,000 worth. Of pressed glass the district produced $3,500,000. The total glass product of the Pittsburg district was $38,000,000, which was more than twice as much as all the product of all the balance of the United States.

Of air brakes Pittsburg produced $10,416,000 worth in 1896, while all the balance of the United States produced but $7,005,000 worth. The city is the center of the greatest car-building industry in the world. In 1906 this branch alone gave employment to 47,500 men and consumed 1,000,000 gross tons of steel from which were manufactured 80,000 cars, the daily output being 270 cars. The tin plate industry of Pittsburg is a comparatively new one, yet it produced 175,000 net tons in 1906. In structural shapes of iron and steel, the Pittsburg district produced 881,932 gross tons, while the balance of the United States produced 778,587 gross tons. The city also surpassed all cities of the world in the product of cork and in pickled and canned goods. Of the former it consumed 5,000 tons and turned out a product valued

at $2,500,000. The value of pickled and canned goods put up in Pittsburg during the same year was $7,500,000. A greater part of the oil produced in Western Pennsylvania is produced by Pittsburg capital. The Pittsburg district produced in 1905, 7,476,786 barrels, which was more than the product of any nation in the world except Russia. The coal product of the district in 1906 was 46,000,000 tons. This was more than twice as much as Russia produced, nearly a million tons more than Austria-Hungary produced and nearly the one-twentieth of the product of the entire world. The city also leads the world in the manufacture of lenses and all other astronomical instruments. These are shipped to all parts of the world. They were awarded the grand prize at the Paris Exposition, and have been used by astronomers in all countries in their most important observations for many years. The tobacco trade of the city is also immense. The Pittsburg stogie has invaded almost every part of the United States. The cigar and stogie manufacturers consume each year about 2,000 car loads of leaf tobacco. It is claimed that the city roasts more coffee and produces more white lead than any other city in the world.

In the manufacture of fire-proofing and fire-proof buildings, the city has become second to none in the world. In the production of fire-proofing material alone Pittsburg invests fifteen million dollars annually, and has an output of one million tons.

In manufacturing underground cables for telephones and telephone lines, Pittsburg leads the entire country with an annual output of thirteen million dollars worth, while there is located here the largest insulating-varnish works in the entire world. It also stands first in gear-cutting and is among the nations leading sanitary enameled ware makers.

There are thirty-eight states out of the forty-five, which produce less each year than the Pittsburg district alone. The "Review of Reviews," in 1904, accredited the Pittsburg district with 5,000 manufacturing plants, giving daily employment to 250,000 people, with an estimated product of $450,000,000, and an invested capital of two billions of dollars.

By far the most astounding feature of Pittsburg is its tonnage. The tonnage of a city includes all of the material products shipped from it and all shipped into it, but it does not include materials passing through from other points. The Chamber of Commerce has kept a careful account of the freight traffic for years, and has found that the tonnage of the city has grown gradually until it is now so stupendous that it can scarcely be conceived. In 1906 it reached a total of 122,000,000 of net tons. Of this immense traffic the railroads were accredited with 113,000,000 and the harbor with 9,000,000 tons. Some comparative statements are necessary to enable the reader to comprehend the immensity of these figures. Though the capacity of a modern freight car is fifty tons or more, it is generally estimated that an average shipment is about twenty-five tons per car. The tonnage of Pittsburg in 1906, therefore, would have required 4,880,000 cars to transport it. Estimat-

ing that each train averages twenty-five loaded cars, the total tonnage of the city could have been moved only by 195,200 trains of cars with twenty-five cars in every train and twenty-five tons on every car. It was, as indicated above, not all transported by railway. On the Ohio river the "Sprague" alone has frequently steamed from the Pittsburg harbor with from 50 to 60 thousand tons of coal as her share for one trip in moving this product.

But the reader will perceive that this is counting some material twice, for sand and other materials are sent here in one form and shipped away in finished products, and both shipments are included in the tonnage of Pittsburg. In 1906 the output of Pittsburg and its adjacent industries was 300,000 tons per day which in the year gave a finished product of 90,000,000 of tons, and for this they received about $450,000,000. The actual output of Pittsburg would therefore require 140,000 trains of cars with twenty-five cars in every train and twenty-five tons in every car.

The "Review of Reviews" used a figure of speech which aptly illustrates the greatness of Pittsburg's product. "The greatest of Egyptian pyramids, Cheops, weighs about seven millions of tons, and is three times the cubic size of the largest church in the world, St. Peter's. It required one hundred thousand slaves, working steadily for twenty years as men worked then, to build this pyramid. Yet Pittsburg transports many miles to and fro, raises and lowers hundreds of feet and transforms yearly into the bones and sinews of civilization the weight of a dozen great pyramids like Cheops." The tonnage of Pittsburg would more than build seventeen pyramids like Cheops in weight each year, while its output would build more than one each month. Great Britain has long since boasted of the traffic of the docks of London, but the product of the Pittsburg district in a year weighs five times as much as the London docks can handle in the same time. All the docks and ships of London, New York, Antwerp, Hamburg, Liverpool and Glasgow, have never yet in one year transported 100,000,000 tons, even by their own boasted statistics. Pittsburg, indeed, ranks with nations rather than with cities, in other matters besides the iron trade.

It is a little over a century and a half since the first white man, of whose explorations we have any definite record, visited this section of Western Pennsylvania and found it covered with the "forest primeval." Pittsburg will reach the one hundred and fiftieth anniversary of the domination of the English-speaking people in November, 1908. Founded as it was in English territory by the French from the Canadas, the possession of the new fortress, as the reader will re-call, became at once a matter of the highest importance to the two mighty nations across the ocean. In that respect it had no infancy but became a famous stronghold, even at its birth. But otherwise during its first fifty years it made but little progress, for the population in 1808 was perhaps not over 4,000. Nor was the second half century of its existence a period of marvelous growth, for in 1858 the people of the two cities were numbered by less than 75,000. Its greatest strides have, therefore, been

made in the last century, and practically in the last fifty years. There are few cities in the world's history which have prospered as it has. From a wilderness in 1758, from a collection of mud-plastered log huts in 1808—or from an inland city of seventy-five thousand in 1858—it has grown and waxed strong until now it compares favorably with any city in the United States, and in some very important respects it has surpassed any and all of the cities of the world.

More than any other city in the United States, and perhaps more than any city in the world, Pittsburg has depended upon its own efforts for its wealth and prosperity. New York depends upon its ocean commerce and has grown great on a tribute paid to it by banks, by insurance and by the corporate wealth of all parts of the country. San Francisco and New Orleans both increased because of their foreign traffic, while Chicago depends for her prominence upon being a market for the products of the boundless West and for her position on the shores of Lake Michigan. But Pittsburg with none of these advantages—indeed with no advantages save in the natural wealth of the community—has achieved her greatness by depending almost entirely upon her own brain, her own energy and her own industry. Here by the banks of the three rivers she established her infantile industries nearly a century ago; and with but little outside assistance she has widened her workships, increased and perfected her output and extended her market until to-day the gates of every city in the world swing silently inward to receive her products.

SKY LINE OF PITTSBURG.

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